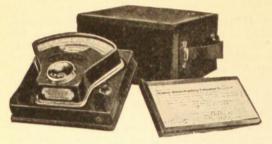
Weston Electrical Instrument Co.
Newark, New Jersey
in
Northern Electric Co., Ltd.
General Catalogue No. 4
(undated)

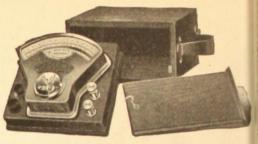
182661

WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT
MODEL 1

VOLTMETERS





| Vo | | |
|----|--|--|
| | | |
| | | |

Volt-ammeter

| | 171 | Single | Range | | No. of | |
|-------------------|------------------------------|---------------|--------------|-------------------|--------------------|---------------|
| Range in Volts | No. of Scale Divisions | Price Each | Trade No. | Range in Volts | Scale Divisions | Price Each |
| 3 | 150 | \$72.00 | 182646 | 250 | 125 | \$81.21 |
| 15 | 150 | 72.00 | 182647 | 300 | 150 | 81.20 |
| 50 | 100 | 72.00 | 182648 | 500 | 100 | 81.25 |
| 75 | 150 | 72.00 | 182649 | 600 | 120 | 81.25 |
| 150 | 150 | *68.75 | 182650 | 750 | 150 | 87.50 |
| 150 | 150 | 72.00 | | | | |
| | | | Range | | | |
| [15] | 150 | 93.75 | 182655 | {300} | 150 | 97.00 |

| 102001 | 3 3 | 150 | 50.10 | 102000 | 1150 | 150 | 97.00 |
|--------|--------------------|-----|--------|--------|--------------------|-----|--------|
| 182652 | {150} | 150 | 93.75 | 182656 | { 500 } { 250 } | 125 | 100.00 |
| 182653 | 150 } | 150 | 93.75 | 182657 | { 600 } { 150 } | 150 | 100.00 |
| 182654 | ${150 \atop 75}$ | 150 | 93.75 | 182658 | { 600 } { 300 } | 150 | 100.00 |
| | (, | | | 182659 | { 750 } { 150 } | 150 | 100.00 |
| | | | Triple | Range | (550) | | |
| 182660 | ${150 \choose 15}$ | 150 | 106.25 | 182662 | $\binom{750}{300}$ | 150 | 112.5 |
| 202300 | 3 | 100 | 200,20 | 102002 | 150 | | |

Single and double range instruments are furnished with locking contact and key. Triple range instruments do not have contact key.

109.50

Single and double range instruments will be provided with a reversing switch instead of contact key at an additional cost of \$3.25.

*Furnished without contact key.

150

| AN | 1M | ET | E, | RS |
|----|----|----|----|----|
| | | | | |

| | | NT6 | Single | Range | | No. of | |
|--------------|---------------------|------------------------------|----------------|--------------|---------------------|--------------------|---------------|
| Trade No. | Range in Amperes | No. of Scale Divisions | Price :Each | Trade No. | Range in Amperes | Scale Divisions | Price Each |
| 182663 | 1 | 100 | \$81.25 | 182672 | 50 | 100 | \$81.25 |
| 182664 | 1.5 | 150 | 81.25 | 182673 | 100 | 100 | 87.75 |
| 182665 | 2 | 100 | 81.25 | 182674 | 150 | 150 | 93.75 |
| 182666 | 2.5 | 125 | 81.25 | 182675 | 200 | 100 | 100.00 |
| 182667 | 3 | 150 | 81.25 | 182676 | 250 | 125 | 100.00 |
| 182668 | 5 | 100 | 81.25 | 182677 | 300 | 150 | 100.00 |
| 182669 | 10 | 100 | 81.25 | 182678 | 400 | 80 | 112.50 |
| 182670 | 15 | 150 | 81.25 | 182679 | 500 | 100 | 112.50 |
| 182671 | 25 | 125 | 81.25 | | | | |
| | | | VOLT-AM | METERS | | | |

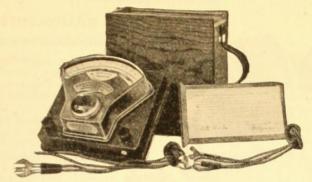
| | | TODI IIIIANIEDIZIO |
|------|----------|--------------------|
| | | |
| rada | Rango in | Range in |

| Trade | Range in | Range in | Scale | Price |
|--------|----------|----------|--|---------|
| No. | Volts | Amperes | Divisions | Each |
| 182680 | 150 | 1.5 | 150 | \$93.75 |
| 182681 | /150 | 3 | 150 | 93.75 |
| 31 111 | | 711 1 1 | and the second of the second o | |

No. of

Model 1 voitammeters of other ranges will be made on special order.

FOR DIRECT CURRENT



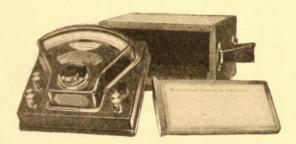
Milli-voltmeter

PORTABLE MILLI-VOLTMETERS

| | | Model 1 | 77. 1 |
|--------------|-------------|---|---------------|
| Trade No. | Mfrs No. | | Price Each |
| 063171 | 1 | Range, 0 to 20 milli-volts, 100 divisions, each representing .2 of a milli-volt, readable to .02 of a milli-volt | \$62.50 |
| 063172 | 2 | Range, 10 to 0 to 10 milli-volts, zero center, 100 divisions, each representing 2 of a milli-volt readable to 02 of a milli-volt. | 62.50 |
| 063173 | 3 | Double range, 10 to 0 to 10 and 100 to 0 to 100 milli-voit, zero center, 100 divisions, supplied with contact key, by the use of which either range may be employed. | 68.75 |
| 063174 | 4 | Double range, 0 to 20 and 0 to 200 milli-volts, three binding posts, 100 divisions, each representing either .2 of a milli-volt or 2 milli-volts, according to range used | 68.75 |

These instuments may be arranged for use with alloy shunts for ampere measurements at an additional cost of \$6.25

PORTABLE MILLI-AMMETERS

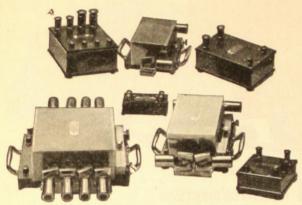


Single Range

| | 5111 | 810 10000 | D |
|--|-----------------------------|--|--|
| Trade No. 163175 163176 163179 | Mfrs. No. 0 1 4 | Range Milli-amperes 150 300 1500 | Price Each \$62.50 62.50 68.75 |
| | Dot | ible Range | |
| | | ∫ 500 | 75.00 |
| 163180 | 5 | 50 500 | 75.00 |
| 100101 | 6 | 10 | |
| 63181 | | } 500 | 93.75 |
| 163182 | 7 | { 10 | |

No. 7 has same range and capacity as No. 6 but is supplied with a small resistance box or sultiplier, having two coils. When this is connected in series with the instrument binding posts tarked 10, the lower scale may be read directly in volts, a full scale deflection being secured with 0 or 100 volts, according to the coil of the multiplier used.

FOR DIRECT CURRENT



MILLIVOLTMETERS, MODEL 1

With Shunts for Ampere Measurements

These millivoltmeters, in connection with Weston Patent Alloy Shunts, readirectly in amperes. Shunts of different sizes can be adjusted to the same instrument, and it can, therefore, be used to measure a current of 2000 amperes with the same degree of accuracy as a current of 1 ampere. The combination of millivoltmeter and shunt is practically compensated for temperature and is correct within ¼ of 1 per cent. If, at any time the user of this combination desires to employ additional ranges to those for which the instrument is already adjusted,

Standard Portable Special Alloy Shunts it is simply necessary to purchase additional shunts of the ranges required, thus saving the expense of an additional instrument. The scales of the instrument can be divided into 100, 120 or 150 divided into 100 divide divided into 100, 120 or 150 divisions. In selecting shunts of different range for use in connection with one instrument, it should be considered that the higher ranges must be even multiples of the lower one in order to suit the same scale on the instrument.

These shunts can be supplied in two or more ranges combined in one case, as indicated

in price list below.

085355 30-15-7.5-1.5

085358 50-20-5-0.5 75.75

085356 50-5-0.5

085357 50-10-1

65.50

55.00

55.00

MILLIVOLTMETERS

| Trade | | Price Each |
|--------|-----------------------------------|---------------|
| 085304 | Standard portable millivoltmeters | \$62.50 |

SHUNTS

With Single Range

| - | | | m 1 | P : | n. | m 1 | Daniel in | Daise |
|--------|------------|---------|------------|---------------------|---------------|--------------|---------------------|---------------|
| Trade | Rangein | Price | Trade | Range in Amperes | Price Each | Trade No. | Range in Amperes | Price Each |
| No. | Amperes | Each | No. | | | | | |
| 085305 | | \$13.75 | 085313 | 75 | \$34.50 | 085321 | 600 | \$75.75 |
| 085306 | 3 | 17.25 | 085314 | 100 | 41.25 | 085322 | 750 | 82.50 |
| 085307 | 5 | 20.75 | 085315 | 150 | 44.75 | 085323 | 800 | 89.50 |
| 085308 | 10 | 20.75 | 085316 | 200 | 48.25 | 085324 | 1000 | 110.00 |
| 085309 | 15 | 20.75 | 085217 | 250 | 51.75 | 085325 | 1500 | 178.75 |
| 085310 | 25 | 24.25 | 085318 | 300 | 55.00 | 085326 | 2000 | 240.75 |
| 085311 | 30 | 27.50 | 085319 | 400 | 62.00 | | | |
| | 50 | 30.75 | 085320 | 500 | 68.75 | | | |
| 085312 | 90 | 30.13 | 000020 | 500 | 00.10 | | | |
| | | * | With Marco | Ranges Combine | din One C | 200 | | |
| | | , | WITH I WO | Kanges Combine | ed in one c | asc | | |
| 085327 | 5 and 1 | 27.50 | 085335 | 100 and 10 | 55.00 | 085343 | 400 and 200 | 89.50 |
| 085328 | 10 and 1 | 30.75 | 085336 | 150 and 15 | 58.50 | 085344 | 500 and 50 | 86.00 |
| 085329 | 15 and 1.5 | | 085337 | 150 and 30 | 62.00 | 085345 | 500 and 100 | 89.50 |
| 085330 | 15 and 3 | 34.50 | 085338 | 200 and 20 | 65.50 | 085346 | 500 and 200 | 89.50 |
| 085331 | 30 and 3 | 34.50 | 085339 | 300 and 15 | 72.25 | 085347 | 600 and 60 | 89.50 |
| | | | | 300 and 30 | 75.75 | 085348 | 600 and 300 | 110.00 |
| 085332 | 40 and 4 | 38.00 | 085340 | | | | 750 and 300 | 123.75 |
| 085333 | 50 and 5 | 41.25 | 085341 | 300 and 150 | 82.50 | 085349 | | 192.50 |
| 085334 | 75 and 15 | 48.25 | 085342 | 400 and 40 | 82.50 | 085350 | 1000 and 500 | 192.00 |
| | | | | | | | | |
| | | With | Three or | More Ranges Cor | nbined in (| one Case | | |
| 085351 | 15-3-0.75 | 41.25 | 085359 | 75-15-1.5 | 58.50 | 085367 | 150-75-15-1.5 | 89.50 |
| | 15-3-1.5 | 41.25 | | 100-10-1 | 62.00 | | 150-75-15-1.5-0.75 | 96.25 |
| | | | | 100-10-1 | 62.00 | | 200-20-2 | 75.75 |
| | 30-15-1.5 | 48.25 | | | | | 200-100-10 | 82.50 |
| 085354 | 30-15-3 | 48.25 | 085362 | 100-50-20-2 | 82.50 | | 200-100-10 | 02.50 |

96.25

68.75

82.50

75.75

085371 300-15-1.5

085372 300-30-3

085373 300-75-15

82.50

89.50

085366 150-75-15 Above prices include adjustment between millivoltmeter and shunts.

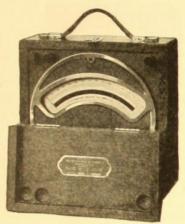
085363 100-50-20-10-5-1

085365 150-15-1.5-0.15

085364 150-15-1.5

FOR DIRECT CURRENT

MODEL 45



Voltmeter



Ammeter

The movement in the Model No. 45 instrument is completely enclosed in an iron case, ecurely fastened in a wooden carrying box, which protects it from stray magnetic fields.

This box is provided with a hinged cover, which protects the scale and binding posts. Amneters, having a maximum range of 25 amperes or less, are provided with self-contained shunts. Tigher ranges are adjusted to external station type shunts.

VOLTMETERS

| Trade No. 625 626 | Ranges in Volts 0- 3 0- 5 0- 15 | Value of Each Scale Division in Volts .02 .05 | Price Each \$41.25 41.25 41.25 |
|----------------------------|---|---|--|
| 627 628 629 630 | 0-15 0-150 0-300 0-600 0-750 | 1 2 5 5 | 48.75 53.75 57.75 61.00 |

Double and triple range voltmeters will be furnished when desired in the combinations sted under Model 1 voltmeter. To determine the price of such instruments add \$8.25 for each lditional range to the price as listed above for the highest range.

AMMETERS

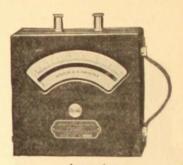
| rade Vo. | Ranges in Amperes 0- 5 | Value of Each Scale Division in Amperes . 05 . 1 | Price Each \$41.25 41.25 |
|----------------|------------------------------|--|-----------------------------------|
| 33 34 35 | 0- 15 0- 25 0- 50 | .5 | $41.25 \\ 42.00 \\ 43.75$ |
| 37 38 39 | 0-100 0-150 0-200 | 1 2 2 | 44.50 46.25 46.75 |
| 40 41 42 | 0-250 0-300 0-400 | 2 5 5 | 46.75 47.00 48.75 |
| 140 | 0-500 | | |

FOR ALTERNATING CURRENT

MODEL 155



Voltmeter



Ammeter

These instruments may be used on circuits of any frequency from 15 to 140 cycles per second without sensible error in their indications.

The various ranges of voltmeters listed are all self-contained. They include instruments adapted to a full scale deflection with 75 volts, to instruments to give a full scale deflection with 750 volts. For use with higher voltages multipliers or transformers must be used.

The ammeters listed may be used on circuits having a difference in potential of 2300 volts. For higher ranges or voltages transformers must be used.

VOLTMETERS

| - | | | Discourse Transport | | Price |
|--------------|-------------------|--------|--------------------------|-------|---------|
| Trade No. | Range In Volts | Length | Dimensions, Inches Width | Depth | Each |
| 06951 | 75 | 7 | 71/8 | 31/4 | \$33.75 |
| 06952 | 125 | 7 | 71/8 | 31/4 | 33.75 |
| 06953 | 150 | 7 | 71/8 | 31/4 | 34.50 |
| 06954 | 300 | 7 | 71/8 | 31/4 | 40.50 |
| 06955 | 500 | 73/4 | 83/4 | 4 | 47.00 |
| 06956 | 600 | 73/4 | 83/4 | 4 | 48.75 |
| 06957 | 750 | 73/4 | 83/4 | 4 | 52.75 |

All the above ranges of voltmeters are provided with self-contained resistances.

AMMETERS

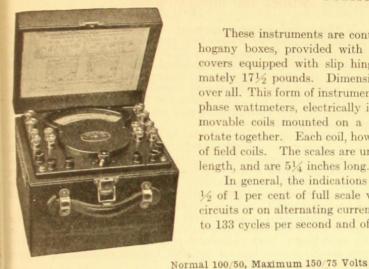
| Trade | Range | | _ | DI | MENSIONS, INC | | | Price |
|--------|-----------|---|-------|---------|---------------|----------------|---------|-------------|
| No. | In Ampere | S | Leng | th | Width | Depth | | Each |
| 06958 | 1 | | 7 | | 71/8 | 31/4 | | \$32.75 |
| 06959 | 2 | | 7 | | 71/8 | 31/4 | | 32.25 |
| 06960 | 3 | | 7 | | 71/8 | 31/4 | | 31.25 |
| 06961 | 5 | | 7 | | 71/8 | 31/4 | | 31.25 |
| 06962 | 10 | | 7 | | 71/8 | 31/4 | | 31.25 |
| 06963 | 15 | | 7 | | 71/8 | 31/4 | | 31.25 |
| 06964 | 25 | | 7 | | 71/8 | 31/4 | | 31.25 |
| 06965 | 50 | | 7 | | 71/8 | 31/4 | | 32.25 |
| 06966 | 75 | | 7 | | 71/8 | 31/4 | | 32.25 |
| 06967 | 100 | | 7 | | 71/8 | 31/4 | | 32.25 |
| 06968 | 150 | | 7 | | 71/8 | 31/4 | | 33.00 |
| 06969 | 200 | | 7 | | 71/8 | 31/4 | | 33.75 |
| 06970 | 250 | | 7 | | 71/8 | 31/4 | | 34.50 |
| 06971 | 300 | | 7 | | 71/8 | 31/4 | | 34.75 |
| 052636 | 400 | | 7 | | 71/8 | 31/4 | | 38.00 |
| 052637 | 500 | | 7 | | 71/8 | 31/4 | | 41.25 |
| F121 | 4 | | marat | be need | for the m | possurement of | all the | alternating |

The current transformers must be used for the measurement of all the alternating currents greater than 500 amperes.

MILLIAMMETERS

| | | TAT TTO TO TO T | ATA ATA ME A ME A TO | | |
|-------|---------------|-----------------|----------------------|-------|---------|
| Trade | Rangein | | - DIMENSIONS, INCHES | | Price |
| No. | Milliammeters | Length | Width | Depth | Each |
| 06972 | 75 | 7 | 71/8 | 31/4 | \$32.75 |
| 06973 | 150 | 7 | 71/8 | 31/4 | . 32.75 |
| 06974 | 250 | 7 | 71/8 | 31/4 | 32.75 |
| 06975 | 500 | 7 | 71/8 | 31/4 | 32.75 |
| 06976 | 750 | 7 | 71/8 | 31/4 | 32.75 |

For Alternating and Direct Current
WATTMETERS—MODEL 329—POLYPHASE



31578

AMPERES

These instruments are contained in highly polished mahogany boxes, provided with carrying handles, locks, and covers equipped with slip hinges. The weight is approximately 171/2 pounds. Dimensions are 91/2x101/2x81/6 inches over all. This form of instrument really consists of two singlephase wattmeters, electrically independent, but having their movable coils mounted on a common shaft, so that they rotate together. Each coil, however, moves in its own system of field coils. The scales are uniform throughout their entire length, and are 51/4 inches long.

In general, the indications may be relied upon to within ½ of 1 per cent of full scale value on either direct current circuits or on alternating current circuits of any frequency up to 133 cycles per second and of any wave form.

No. of

| 1 | Trade | Non | MAL | MAXI | MUM | Field Coils | Field Coils | Scale | Price |
|----|-------|--------|----------|--------|-----------|-----------------------------|-------------------|-------|----------|
| | No. | Series | Multiple | Series | Multiple | in Series | in Multiple | Lines | Each |
| 1 | 31543 | 1 | 2 | 2 | 4 | 200/100 | 400/200 | 100 | \$181.50 |
| | 31544 | 2.5 | 5 | 5 | 10 | 500/250 | 1000/500 | 100 | 181.50 |
| | 31545 | 5 | 10 | 10 | 20 | 1/.5 K.W. | 2/1 K.W. | 100 | 181.50 |
| - | 31546 | 10 | 20 | 20 | 40 | 2/1 K.W. | 4/2 K.W. | 100 | 189.75 |
| | 01010 | | | | | Maximum 250/125 | Volts | 150 | 181.50 |
| 1 | 31547 | 1 | 2 | 2 | 4 | 300/150 | 600/300 | 150 | 181.50 |
| 1 | 31548 | 2.5 | 5 | 5 | 10 | 750/375 | 1500/750 | 150 | 181.50 |
| | 31549 | 5 | 10 | 10 | 20 | 1.5/.75 K.W. | 3/1.5 K.W. | 150 | 189.75 |
| | 31550 | 10 | 20 | 20 | 40 | 3/1.5 K.W. | 6/3 K.W. | 150 | 109.10 |
| | 01000 | | | | | Maximum 300/150 | Volts | 100 | 189.75 |
| 1 | 31551 | 1 | 2 | 2 | 4 | 400/200 | 800/400 | 100 | 189.75 |
| 1 | 31552 | 2.5 | 5 | 5 | 10 | 1/.5 K.W. | 2/1 K.W. | 100 | 189.75 |
| | 31553 | 5 | 10 | 10 | 20 | 2/1 K.W. | 4/2 K.W. | 100 | 198.00 |
| | 31554 | 10 | 20 | 20 | 40 | 4/2 K.W. | 8/4 K.W. | 100 | 100.00 |
| 1 | 01001 | | | | 300/150, | Maximum 450/250 | 1200/600 | 120 | 189.75 |
| 1 | 31555 | 1 | 2 | 2 | 4 | 600/300 | 3/1.5 K.W. | 150 | 189.75 |
| 1 | 31556 | 2.5 | 5 | 5 | 10 | 1.5/.75 K.W. | 6/3 K.W. | 150 | 189.75 |
| | 31557 | 5 | 10 | 10 | 20 | 3/1.5 K.W. | | 120 | 198.00 |
| | 31558 | 10 | 20 | 20 | 40 | 6/3 K.W. | 12/6 K.W. | 120. | 100.00 |
| | 01000 | | | Normal | 500/100, | Maximum 600/150 | 2000/400 | 100 | 206.25 |
| 1 | 31559 | 1 | 2 | 2 | 4 | 1000/200 | 5000/1000 | 100 | 206.25 |
| 1 | 31560 | 2.5 | 5 | 5 | 10 | 2500/500 | 10/2 K.W. | 100 | 206.25 |
| 1 | 31561 | 5 | 10 | 10 | 20 | 5/1 K.W. | 20/4 K.W. | 100 | 214.50 |
| | 31562 | 10 | 20 | 20 | 40 | 10/2 K.W. | Volts | 100 | |
| 11 | 01002 | | | Normal | 600/150, | Maximum 675/250 1200/300 | 2400/600 | 120 | 210.50 |
| 1 | 31563 | 1 | 2 | 2 | 4 | 3/.75 K.W. | 6/1.5 K.W. | 150 | 210.50 |
| 11 | 31564 | 2.5 | 5 | 5 | 10 | 6/1.5 K.W. | 12/3 K.W. | 150 | 210.50 |
| | 31565 | 5 | 10 | 10 | 20 | 12/3 K.W. | 24/6 K.W. | 120 | 218.75 |
| | 31566 | 10 | 20 | 20 | 40 | , Maximum 675/45 | o Volts | | |
| | | | | | 4 | 1.2/.6 K. W. | A . I / I . M I I | 120 | 210.50 |
| | 31567 | 1 | 2 | 2 | 10 | 3/1.5 K.W. | .6/3 K.W. | 150 | 210.50 |
| | 31568 | 2.5 | 5 | 5 | | 6/3 K.W. | 12/6 K.W. | 120 | 210.50 |
| | 31569 | 5 | 10 | 10 | 20 | 12/6 K.W. | 24/12 K.W. | 120 | 218.75 |
| | 31570 | - 10 | 20 | 20 | 40 | , Maximum 750/25 | o Volts | 150 | 014 50 |
| 1 | | | 0 | | 4 | 1500/300 | | 150 | 214.50 |
| - | 31571 | 1 | 2 | 2 5 | 10 | 3750/750 | 7500/1500 | 150 | 214.50 |
| | 31572 | 2.5 | 5 | | 20 | 7.5/1.5 K.W. | 15/3 K.W. | 150 | 214.50 |
| | 31573 | 5 | 10 | 10 | 40 | 15/3 K W. | 30/6 K.W. | 150 | 222.75 |
| | 31574 | 10 | 20 | 20 | 1 750/300 | , Maximum 750/45 | o Volts | 150 | 214.50 |
| 1 | | | 0 | Norma. | 4 | 1900/000 | | | 214.50 |
| | 31575 | 1 | 2 | 5 | - 10 | 3750/1500 | 7500/3000 | 150 | |
| | 31576 | 2.5 | 5 | | 20 | 7.5/3 K.W. | 15/6 K.W. | 150 | 214.50 |
| 10 | 31577 | 5 | 10 | 10 | 40 | T TX | 30/12 K.W. | 150 | 222.75 |

40

15/6 K.W.

20

20

*Ranges not marked K.W. read in watts.

10

*WATT RANGES

For Alternating and Direct Current WATTMETERS-MODEL 310-SINGLE-PHASE



These instruments represent the latest development in electro-dynamometer wattmeters and embody many character istics hitherto considered unattainable in instruments of this class They are contained in highly polished mahogany boxes, provided with carrying handles, locks, and covers equipped with slip hinges The weight is approximately 11 pounds and the dimensions are 8x101/4x53/4 over all. The scales are 51/4 inches long, uniform throughout their entire length, and are provided with mirrors to prevent parallax errors.

A reversing switch is provided by means of which the direction of the current through the movable coil may be changed without changing the direction through the rest of the potential circuit. This switch will be found very useful in connecting the wattmeter to circuits in which the polarity is not known. In addition to the

reversing switch, a locking contact key is provided, by means of which the potential circuit may be opened.

In general, these instruments are guaranteed to an accuracy of ¼ of 1 per cent of full scale. value for use on either direct current circuits or alternating current circuits of any frequency to 133 cycles per second and of any wave form. Each instrument is accompanied by a certificate, giving its electrical characteristics, general instructions for use, and diagram showing the correct binding posts to be employed for the various ranges.

Double ranges for both the current and voltage circuits are provided. These ranges are

controlled by means of independent binding posts.

It will be noted from the table following that these instruments can be furnished with self-contained potential ranges up to 750 volts. For higher ranges, the use of potential transformers is recommended.

Multipliers with Y connected resistors, arranged so that the pressure circuit of single-phase wattmeters may be properly connected for use on 3-phase balanced systems, can be furnished.

Prices on request.

MODEL 310 SINGLE-PHASE WATTMETERS

| Normal 100/50, Maximum 150/75 Volts | | | | | | | | | | |
|-------------------------------------|--------|----------|------|-------------|-----------------|-------------|--------------|----------|--|--|
| | | AMPE | | 141 100/00, | *WATT RA | | | | | |
| Trade | | RMAL | MA | XIMUM | Field Coils | Field Coils | No. of Scale | | | |
| No. | Series | Multiple | | Multiple | in Series | in Multiple | Lines | Each | | |
| 131451 | 1 | 2 | 2 | 4 | 100/50 | 200/100 | 100 | \$115.50 | | |
| 131452 | 2.5 | 5 | 5 | 10 | 250/125 | 500/250 | 125 | 115.50 | | |
| 131453 | 5 | 10 | 10 | 20 | 500/250 | 1000/500 | 100 | 115.50 | | |
| 131454 | 10 | 20 | 20 | 40 | 1/.5 K.W. | 2/1 K.W. | 100 | 115.50 | | |
| 131455 | 20 | 40 | 40 | 80 | 2/1 K.W. | 4/2 K.W. | 100 | 123.75 | | |
| 131456 | 30 | 60 | 60 | 120 | 3/1.5 K.W. | 6/3 K.W. | 150 | 123.75 | | |
| 131457 | 50 | 100 | 75 | 150 | 5/2.5 K.W. | 10/5 K.W. | 100 | 123.75 | | |
| | | | Norn | nal 150/75, | Maximum 250/125 | Volts | | | | |
| 131458 | 1 | 2 | 2 | 4 | 150/75 | 300/150 | 150 | 115.50 | | |
| 131459 | 2.5 | 5 | 5 | 10 | 375/187.5 | 750/375 | 150 | 115.50 | | |
| 131460 | 5 | 10 | 10 | 20 | 750/375 | 1500/750 | 150 | 115.50 | | |
| 131461 | 10 | 20 | 20 | 40 | 1.5/.75 K.W. | 3/1.5 K.W. | 150 | 115.50 | | |
| 131462 | 20 | 40 | 40 | 80 | 3/1.5 K.W. | 6/3 K.W. | 150 | 123.75 | | |
| 131463 | 30 | 60 | 60 | 120 | 5/2.5 K.W. | 10/5 K.W. | 100 | 123.75 | | |
| 131464 | 50 | 100 | 75 | 150 | 7.5/3.75 K.W. | 15/7.5 K.W. | 150 | 123.75 | | |
| | | | Norm | al 200/100, | Maximum 300/150 | Volts | | | | |
| 131465 | 1 | 2 | 2 | 4 | 200/100 | 400/200 | 100 | 123.75 | | |
| 131466 | 2.5 | 5 | 5 | 10 | 500/250 | 1000/500 | 100 | 123.75 | | |
| 131467 | 5 | 10 | 10 | 20 | 1/.5 K.W. | 2/1 K.W. | 100 | 123.75 | | |
| 131468 | 10 | 20 | 20 | 40 | 2/1 K.W. | 4/2 K.W. | 100 | 123.75 | | |
| 131469 | 20 | 40 | 40 | 80 | 4/2 K.W. | 8/4 K.W. | 100 | 132.00 | | |
| 131470 | 30 | 60 | 60 | 120 | 6/3 K.W. | 12/6 K.W. | 120 | 132.00 | | |
| 131471 | 50 | 100 | 75 | 150 | 10/5 K.W. | 20/10 K.W. | 100 | 132.00 | | |
| | | | Norm | al 300/150, | Maximum 450/250 | Volts | | | | |
| 131472 | 1 | 2 | 2 | 4 | 300/150 | 600/300 | 150 | 123.75 | | |
| 131473 | 2.5 | 5 | 5 | 10 | 750/375 | 1500/750 | 150 | 123.75 | | |
| 131474 | 5 | 10 | 10 | 20 | 1.5/.75 K.W. | 3/1.5 K.W. | 150 | 123.75 | | |
| 131475 | 10 | 20 | 20 | 40 | 3/1.5 K.W. | 6/3 K.W. | 150 | 123.75 | | |
| 131476 | 20 | 40 | 40 | 80 | 6/3 K.W. | 12/6 K.W. | 120 | 132.00 | | |
| 131477 | 30 | 60 | 60 | 120 | 10/5 K.W. | 20/10 K.W. | 100 | 132.00 | | |
| 131478 | 50 | 100 | 75 | 150 | 15/7.5 K.W. | 30/15 K.W. | 150 | 132.00 | | |
| | | | | d in watts. | | | | | | |

FOR ALTERNATING AND DIRECT CURRENT

WATTMETERS-MODEL 310-SINGLE PHASE

Normal 500/100, Maximum 600/150 Volts

| Trade WATT RANGES No. of | | | | | | | | | | | |
|--------------------------|---------------------------------------|------------------|--------|------------|-------------------------|-----------------------|-----------------|----------|--|--|--|
| Trade No. | Series | RMAL Multiple | MAX | MUMIX | Field Coils | Field Coils | No. of Scale | Price | | | |
| | | | | Multiple | in Series | in Multiple | Lines | Each | | | |
| 131490 | 1 2.5 | 2 | 2 | 4 | 500/100 | 1000/200 | 100 | \$140.25 | | | |
| 131491 | | 5 | 5 | 10 | 1250/250 | 2500/500 | 125 | 140.25 | | | |
| 131492 | 5 | 10 | 10 | 20 | 2500/500 | 5000/1000 | 100 | 140.25 | | | |
| 131493 | 10 | 20 | 20 | 40 | 5/1 K.W. | 10/2 K.W. | 100 | 140.25 | | | |
| 131494 | 20 | 40 | 40 | 80 | 10/2 K.W. | 20/4 K.W. | 100 | 148.50 | | | |
| 131495 | 30 | 60 | 60 | 120 | 15/3 K.W. | $30/6 \mathrm{K.W.}$ | 150 | 148.50 | | | |
| 131496 | 50 | 100 | 75 | 150 | 25/5 K.W. | 50/10 K.W. | 100 | 148.50 | | | |
| | | | Normal | 600/150, 1 | Maximum 675/250 | Volts | | | | | |
| 131497 | 1 | 2 | 2 | 4 | 600/150 | 1200/300 | 150 | 144.50 | | | |
| 131498 | 2.5 | 5 | 5 | 10 | 1500/375 | 3000/750 | 150 | 144.50 | | | |
| 131499 | 5 | 10 | 10 | 20 | 3/.75 K.W. | 6/1.5 K.W. | 150 | 144 50 | | | |
| 131500 | 10 | 20 | 20 | 40 | 6/1.5 K.W. | 12/3 K.W. | 150 | 144 50 | | | |
| 131501 | 20 | 40 | 40 | 80 | 12/3 K.W. | 24/6 K.W. | 120 | 152 75 | | | |
| 131502 | 30 | 60 | 60 | 120 | 20/5 K.W. | 40/10 K.W. | 100 | 152 75 | | | |
| 131503 | 50 | 100 | 75 | 150 | 30/7.5 K.W. | 60/15 K.W. | 150 | 152.75 | | | |
| | Normal 600/300, Maximum 675/450 Volts | | | | | | | | | | |
| 131504 | 1 | 2 | 2 | 4 | 600/300 | 1200/600 | 120 | 144.50 | | | |
| 131505 | 2.5 | 5 | 5 | 10 | 1.5/.75 K.W. | 3/1.5 K.W. | 150 | 144.50 | | | |
| 131506 | 5 | 10 | 10 | 20 | 3/1.5 K.W. | 6/3 K.W. | 150 | 144.50 | | | |
| 131507 | 10 | 20 | 20 | 40 | 6/3 K.W. | 12/6 K.W. | 120 | 144.50 | | | |
| 131508 | 20 | 40 | 40 | 80 | 12/6 K.W. | 24/12 K.W. | 120 | 152.75 | | | |
| 131509 | 30 | 60 | 60 | 120 | 20/10 K.W. | 40/20 K.W. | 100 | 152.75 | | | |
| 131510 | 50 | 100 | 75 | 150 | 30/15 K.W. | 60/30 K.W. | 150 | 152.75 | | | |
| 101010 | 00 | 200 | | | Maximum 750/250 | | | | | | |
| 131511 | 1 | 2 | 2 | 4 | 750/150 | 1500/300 | 150 | 148.50 | | | |
| | 2.5 | 5 | 5 | 10 | 1875/375 | 3750/750 | 150 | 148.50 | | | |
| 131512 | 5 | 10 | 10 | 20 | 3750/750 | 7500/1500 | 150 | 148.50 | | | |
| 131513 131514 | 10 | 20 | 20 | 40 | 7.5/1.5 K.W. | 15/3 K.W. | 150 | 148.50 | | | |
| | 20 | 40 | 40 | 80 | 15/3 K.W. | 30/6 K.W. | 150 | 156.75 | | | |
| 131515 | | 60 | 60 | 120 | 25/5 K.W. | 50/10 K.W. | 100 | 156.75 | | | |
| 131516 | 30 50 | 100 | 75 | 150 | 37.5/7.5 K.W. | | 150 | 156.75 | | | |
| 131517 | 50 | 100 | | | Maximum 750/450 | | | 100.10 | | | |
| | | | | | 750/300 | 1500/600 | 150 | 148.50 | | | |
| 131518 | 1 | 2 | 2 | 4 | 2000/800 | 4000/1600 | 160 | 148.50 | | | |
| 131519 | 2.5 | 5 | 5 | 10 | 3750/1500 | 7500/3000 | 150 | 148.50 | | | |
| 131520 | 5 | 10 | 10 | 20 | | 15/6 K.W. | 150 | 148.50 | | | |
| 131521 | 10 | 20 | 20 | 40 | 7.5/3 K.W. 15/6 K.W. | 30/12 K.W. | 150 | 156.75 | | | |
| 131522 | 20 | 40 | 40 | 80 | 25/10 K.W. | 50/20 K.W. | 100 | 156.75 | | | |
| 131523 | 30 | 60 | 60 | 120 | 37.5/15 K.W. | 75/30 K.W. | 150 | 156.75 | | | |
| 131524 | 50 | 100 | 75 | 150 | | 10/00 11.11. | 100 | 200,10 | | | |
| * T) | | I To | W rook | d in watts | 2 | | | | | | |

^{*} Ranges not marked K.W. read in watts.

SPECIAL MODEL 310 WATTMETERS FOR VERY LOW POWER FACTORS

For measurements in circuits where the power factor is very low, such as core losses in transformers, a special line of Weston Wattmeters has been designed, giving full scale deflection for 20 per cent power factor; that is, the scale value in watts is 20 per cent of the number of volt amperes applied. All wattmeters of this type, except the 1 and 0.5 ampere, are compensated for the power consumed in their potential circuits. A switch is provided by which the instrument may be used with or without this compensation.

The scales are uniform and the instruments have the same general characteristics as the

| Marin Communication of the Com | | |
|--|------------|---|
| regn1 | lar model | |
| a CBC | THE THOUSE | - |

| regular m | odei. | 1 | Maximum Volts 1 | 50/75 | 271 | |
|---|------------------------------------|---|---|-------|---|--|
| Trade No. 131525 131526 131527 131528 131529 131530 131531 †Thea | Fields in Series 0.5 1 2.5 5 10 20 | ACITY, AMPERES Fields in Multiple 1 2 5 10 20 40 | WATT F Fields in Series 15/7.5 30/15 75/37.5 150/75 300/150 600/300 | | No. of Scale Lines 150 150 150 150 150 120 150 itions only, | Price Each †\$132.00 † 132.00 132.00 132.00 140.25 140.25 140.25 |

FOR ALTERNATING AND DIRECT CURRENT



Voltmeter, Model 341



Ammeter, Model 370

These instruments are electro-dynamometer meters and may be used with equal accuracy on either alternating current or direct current circuits.

They are contained in highly polished mahogany boxes, provided with carrying handles, locks and covers equipped with slip hinges. The weight is approximately 11 pounds, and the dimensions are \$x10\\\4x5\\\34\$ inches over all.

Owing to the principle of operation, these instruments cannot be made with a uniform scale, but the upper two-thirds of the scale is remarkably uniform. The length of the scale is 5\\\\4\) inches. The scales are accurately hand calibrated to each cardinal division by direct comparison with

standards, and the intermediate steps are subdivided with great care.

VOLTMETERS-MODEL 341

Single Range

| | | Approx. | | | | Approx. | |
|--------|--------|------------|----------|-----------|---------|-------------|----------|
| Trade | Range | Resistance | Price | Trade | Range | Resistance | Price |
| No. | Volts | Ohms | Each | No. | Volts | Ohms | Each |
| 131401 | 1 | 2 | \$107.25 | 131409 | 15 | 100 | \$103.25 |
| 131402 | 1.5 | 3 | 107.25 | 131410 | 30 | 470 | 99.00 |
| 131403 | 2 | 4 | 107.25 | 131411 | 75 | 1180 | 99.00 |
| 131404 | 3 | 6 | 107.25 | 131412 | 120 | 2700 | 99.00 |
| 131405 | 5 | 18 | 107.25 | 131413 | 150 | 3300 | 99.00 |
| 131406 | 7.5 | 50 | 103.25 | 131414 | 300 | 6700 | 103.25 |
| 131407 | 10 | 66 | 103.25 | 131415 | 600 | 20000 | . 111.50 |
| 131408 | 12 | 80 | 103.25 | 131416 | 750 | 25000 | 115.50 |
| | | | Doub | ole Range | | | |
| 131417 | 5-1 | 10-2 | 115.50 | 131424 | 150-75 | 3300- 1650 | 107.25 |
| 131418 | 15-1.5 | 30-3 | 115.50 | 131425 | 300-150 | 6700- 3350 | 111.50 |
| 131419 | 3-1.5 | 6-3 | 115.50 | 131426 | 600-150 | 20000- 5000 | 119.75 |
| 131420 | 6-3 | 21-10.5 | 115.50 | 131427 | 600-300 | 20000-10000 | 119.75 |
| 131421 | 15-7.5 | 100-50 | 111.50 | 131428 | 750-150 | 25000- 5000 | 123.75 |
| 131422 | 30-15 | 300-150 | 111.50 | 131429 | 750-300 | 25000-10000 | 123.75 |
| 131423 | 120-60 | 2700-1350 | 107.25 | | | | |

AMMETERS-MODEL 370

Milliammeters-Single Range

| | | | Milliam meters- | -Single Range | | | |
|--------------|---------------------|-------------------------------|-----------------|---------------|---------------------|-------------------------------|---------------|
| Trade No. | Range Milliamps. | Approx. Resistance Ohms | Price Each | Trade No. | Range Milliamps. | Approx. Resistance Ohms | Price Each |
| 131430 | 15 | 1400 | \$111.50 | 131436 | 150 | 19.5 | \$111.50 |
| 131431 | 20 | 720 | 111.50 | 131437 | 200 | 7.5 | 111.50 |
| 131432 | 30 | 350 | 111.50 | 131438 | 300 | 3.2 | 111.50 |
| 131433 | 50 | 167 | 111.50 | 131439 | 500 | 1.2 | 111.50 |
| 131434 | 75 | 50 | 111.50 | 131440 | 750 | .9 | 111.50 |
| 131435 | 100 | 26.5 | 111.50 | | | | |
| | | | Ammeters-D | ouble Range | | | |

| | | Ammeters-I | Double Range | | |
|--------------|----------------|---------------|--------------|----------------|---------------|
| Trade No. | Range Amps. | Price Each | Trade No. | Range Amps. | Price Each |
| 131441 | 2-1 | \$123.75 | 131443 | 10-5 | \$123.75 |
| 131442 | 5-21/2 | 123.75 | | | |

WESTON PORTABLE CURRENT AND POTENTIAL TRANSFORMERS

For Use With Portable Alternating Current Instruments



Model 312

Model 313



Model 311

PORTABLE CURRENT TRANSFORMERS

Two forms of Weston Portable Current Transformers are made. One of these forms is a self-contained type, both the primary and secondary windings constituting an integral part of the structure. This type is designated Model 312.

In the other form the secondary winding alone is an integral part of the structure, and the primary winding is inserted in the transformer by the user at the time of making a measurement. This form is therefore known as the inserted primary type, and designated Model 313.

The cores of these models are rectangular in shape and are constructed of thin laminations of special iron alloy punched from solid sheet, so that there are no joints in the magnetic circuit.

Model 312

This type is made in three current capacities, each having three ranges. The primary winding is wound over the secondary, insulated from it, and consists of four sections of insulated copper strips wound side by side in independent spirals in planes perpendicular to the core. The sections can be connected in series, in series-multiple, or all in multiple to obtain the various ratios. To facilitate the changes in ratio, the the terminals of the windings are connected to contact blocks forming a plug switch mounted on the insulated top.

Secondary, 5 amperes. Test, 10000 volts for one minute. Capacity, 25 volt-amperes. Frequency, 25 to 133 cycles.

| m) | | 1 0, | |
|--------|------------|----------------------|---------|
| Trade | | | Price |
| No. | | Ratio | Each |
| 131590 | 10- 20- 40 | amperes to 5 amperes | \$81.75 |
| 131591 | 25- 50-100 | amperes to 5 amperes | 81.75 |
| 131592 | 50-100-200 | amperes to 5 amperes | 81.75 |

Model 313

This type is designed for the measurement of currents in excess of 200 amperes. It consists of a core wound with the secondary winding only, enclosed in a wooden box provided with an opening through which the primary, made of a cable or busbar, may be passed by the user. This type of transformer is much more universally useful for higher range measurements than the self-contained type for the reason that the ratio may be changed at will to suit the conditions of measurement.

Secondary, 5 amperes. Test, 10000 volts for one minute. Capacity, 25 volt-amperes. Frequency, 25 to 133 cycles.

| Capacit | y, 20 voic uniperes. | ricquericy, 20 | ou roo cy cres. |
|---------|----------------------|----------------|-------------------------|
| Trade | | | Size Opening Price |
| No. | Ratio with One | Turn | Inches Each |
| 131593 | 1200 amperes to 5 | amperes | . 2x37/6 \$63.25 |
| 131594 | 1800 amperes to 5 | amperes | . 2x376 66.75 |
| 131595 | 2400 amperes to 5 | amperes | $2x4\frac{7}{16}$ 70.75 |

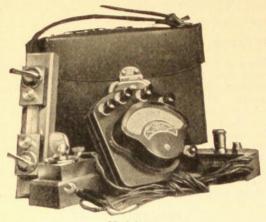
PORTABLE POTENTIAL TRANSFORMERS Model 311

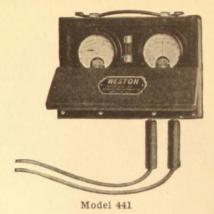
Made in three voltage capacities, each having a double-voltage range. The double range feature is obtained by having the primary winding made in two similar sections, which can be connected in series or in multiple by means of links conveniently located on the insulating top of the transformer case.

Secondary, 110 volts. Capacity, 15 volt-amperes. Frequency, 25 to 133 cycles.

| Trade No. | Ratio | Price Each |
|----------------------------|------------------------------|---------------|
| 131596 131597 131598 | 2200-1100 volts to 110 volts | 70.75 |

WESTON GARAGE TESTING INSTRUMENTS





Model 280

MODEL 280 TESTING INSTRUMENTS

The Weston Model 280 Garage Testing Instrument has six ranges as follows: 30 volts, 3 volts and .1 volt (100 millivolts), 300 amperes, 30 amperes and 3 amperes.

A large number of tests can be made with this combination of ranges. This instrument is the equivalent of six separate electrical measuring instruments of different ranges and it provides a means of making any tests that are necessary on electric starting and lighting systems.

Ordinarily, six instruments of this size would cost in the neighborhood of \$80.00, so that the remarkably low price named on this Model 280 garage testing instrument will be readily appreciated, and especially will its low cost be realized when it is borne in mind that Model 280 is an instrument of the highest grade procurable in its size. It is a standard Weston product, fully guaranteed by the maker and it may be depended upon for accuracy, serviceability and durability that has never been acquired except by other Weston models, and then only in instruments of much higher price. In short, it is a thoroughly reliable instrument of precision, offered in a convenient size and at a price that enables a garage proprietor to obtain a full and permanent electrical testing equipment at an insignificant cost.

A small booklet which describes the Model 280 thoroughly will be sent upon request.

| Trade | | Price |
|--------|--|---------|
| No. | Description | Each |
| 109586 | Complete as above, without leather carrying case | \$41.25 |
| 109587 | Carrying case to contain instrument and shuntnet | 5.00 |

MODEL 441 FAULT FINDERS

The Model 441 consists of an ammeter and a voltmeter mounted in a compact wooden carrying box. The ammeter has a range of 30–0–30 amperes and is protected against accidental burnout by means of a replaceable glass enclosed automobile fuse. The voltmeter is a double range instrument having ranges of 2–0–30 and 0.2–0–3 volts. The latter range is particularly adapted for making cadmium tests.

Each instrument is provided with a zero correcting device.

Both instruments have uniform scales.

Connection between the instrument and the circuit under test is made by means of two eight foot cables having plugs on one end and lead covered clips on the other. The plugs fit into receptacles in the instrument.

A complete instruction book accompanies each instrument.

| Trade No. | Description | Price Each |
|--------------|-------------------|---------------|
| 109588 | Complete as above | \$36.25 |
| 109589 | Cadmium Test Lead | 2.75 |

WESTON ROUND PATTERN STATION INSTRUMENTS FOR DIRECT CURRENT MODEL 57





Regular Type

Flush Type

Diameter of front, 8% inches; diameter of flanged base, 9% inches; total depth, 4% inches; length of scale, 6½ inches; weight, 15 pounds; weight packed, 22 pounds; packing case, 8x10x14 inches.

Case is of cast iron, dustproof and neatly finished, affording effectual protection against external magnetic influences. Made in three patterns: Regular, back connection, and flush type. The scale is drawn on opaque paper, and hence cannot be illuminated from the rear.

| Regular Type | Flush Type | VOLTMETERS | Number of | |
|-----------------------|------------------|------------|-----------------|-----------------|
| Trade | Trade | Range | Scale | Price |
| No. | No. | in Volts | Divisions 60 | Each \$37.50 |
| 016573 | 016585 | 3 | 60 | 37.50 |
| 016574 | 016586 | 6 | 75 | 37.50 |
| 016575 | 016587 | 15 | 50 | 39.00 |
| 016576 | 016588 | 25 | | 39.75 |
| 016577 | 016589 | 50 | 50 | |
| 016578 | 016590 | 75 | 75 | 41.00 |
| 016579 | 016591 | 130 | 65 | 42.50 |
| 016580 | 016592 | 150 | 75 | 44.25 |
| 016581 | 016593 | 250 | 50 | 47.25 |
| 016582 | 016594 | 300 | 60 | 48.75 |
| 016583 | 016595 | 600 | 60 | 52.50 |
| 016584 | 016596 | 750 | 75 | 55.50 |
| | Flush Type | AMMETERS | Number of | Price |
| Regular Type Trade | Trade | Range | Scale | Each |
| No. | No. | in Amperes | Divisions 50 | \$37.50 |
| 016531 | 016552 | 1 | 50 | 37.50 |
| 016532 | 016553 | 5 | 50 | 37.50 |
| 016533 | 016554 | 10 | | 37.50 |
| 016534 | 016555 | 15 | 75 | 37.50 |
| 016535 | 016556 | 25 | 50 | 38.25 |
| 016536 | 016557 | 50 | 50 | 39.00 |
| 016537 | 016558 | 75 | 75 | 39.75 |
| 016538 | 016559 | 100 | 50 | 40.50 |
| 016539 | 016560 | 150 | 75 | 42.00 |
| 016540 | 016561 | 200 | 40 | 42.50 |
| 016541 | 016562 | 250 | 50 | 42.50 |
| 016542 | 016563 | 300 | 60 | 42.75 |
| 016543 | 016564 | 400 | 40 | 44.25 |
| | 016565 | 500 | 50 | 45.75 |
| 016544 | 016566 | 600 | 60 | 47.25 |
| 016545 | | 750 | 75 | |
| 016546 | 016567 016568 | 1000 | 50 | |
| 016547 | | 1200 | 60 | 50.25 |
| 016548 | 016569 | 1500 | 75 | 59.00 |
| 016549 | 016570 | 2000 | 40 | 65.75 |
| 016550 | 016571 | 2500 | 50 | 68.00 |
| 016551 | 016572 | 2500 | | |

The above prices are for No. 11 dull black japan finish.

No extra charge will be made for above instruments with back connection or flush type cases. Always specify the style desired, when ordering.

Ammeters up to and including 75 amperes will be supplied as self contained instruments unless otherwise specified. All other ranges have external shunts.

Regular

WESTON ROUND PATTERN STATION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 24





Flush Typ

Regular Type

Diameter of front, 65% inches; diameter of flanged base, 7½ inches; total depth, 4 inches, length of scale, 5½ inches, weight, 9 pounds; weight packed, 15 pounds; packing case; 10x10x11 inches.

VOLTMETERS

| Type | Flush Type | | Number of | |
|--------------|--------------|-------------------|--------------------|---------------|
| Trade No. | Trade No. | Range in Volts | Scale Divisions | Price Each |
| 016598 | 016611 | 0- 3 | 60 | \$25.50 |
| 016599 | 016612 | 0- 5 | 50 | 25.50 |
| 016600 | 016613 | 0- 6 | 60 | 25.75 |
| 016601 | 016614 | 0- 10 | 50 | 26.50 |
| 016602 | 016615 | 0- 15 | 75 | 26.50 |
| 016603 | 016616 | 0- 25 | 50 | 26.50 |
| 016604 | 016617 | 0- 50 | 50 | 26.50 |
| 016605 | 016618 | 0- 80 | 40 | 26.50 |
| 016606 | 016619 | 0-130 | 65 | 27.25 |
| 016607 | 016620 | 0-150 | 75 | 28.00 |
| 016608 | 016621 | 0-250 | 50 | 32.25 |
| 016609 | 016622 | 0-300 | 60 | 33.75 |
| 016610 | 016623 | 0-600 | 60 | 43.75 |
| | | | | |

AMMETERS

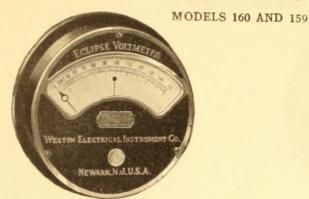
| | | TITLE TALE OF THE PARTY | | |
|---------------------------------|----------------------------|-------------------------|---------------------------------|---------------|
| Regular Type Trade No. | Flush Type Trade No. | Range in Amperes | Number of Scale Divisions | Price Each |
| 016624 | 016635 | 0- 1 | 50 | \$24.75 |
| 016625 | 016636 | 0- 5 | 50 | 24.75 |
| 016626 | 016637 | 0- 10 | 50 | 24.75 |
| 016627 | 016638 | 0- 15 | 75 | 25.50 |
| 016628 | 016639 | 0- 25 | 50 | 25.50 |
| 016629 | 016640 | 0- 50 | 50 | 26.25 |
| 016630 | 016641 | 0- 80 | 40 | 26.25 |
| 016631 | 016642 | 0-100 | 50 | 26.50 |
| 016632 | 016643 | 0-130 | 65 | 27.25 |
| 016633 | 016644 | 0-150 | 75 | 27.25 |
| 016634 | 016645 | 0-200 | 40 | 28.00 |

Ammeters having a range of 80 amperes or less will be supplied as self contained unless otherwise specified. Other ranges have external shunts.

The above prices are for No. 11 dull black japan finish.

WESTON ECLIPSE SWITCHBOARD INSTRUMENTS

FOR DIRECT CURRENT



Model 160



Model 159

These instruments are intended for use as ammeters and voltmeters on direct current switchboards. They are of the "movable iron" or "electro-magnetic type," but in their electrical and mechanical characteristics they are so far in advance of all preceding forms of movable iron instruments, as to mark a new epoch in that type of instrument. They are so much better than most permanent magnet instruments, and they possess the advantage of being much lower in price.

In sensitiveness, or power to promptly respond to minute changes in potential difference, or to minute changes in current strength, they also closely approach the Weston permanent magnet

In their damping qualities they also closely approach the Weston permanent magnet type of instrument.

| | TERS | |
|--|-------------|--|
| | | |
| | | |
| | | |

VOLTMETERS

| | Model 160 | | | Model 160 | |
|--------------|------------------|---------------|--------------|----------------|---------------|
| Trade No. | Range Amperes | Price Each | Trade No. | Range Volts | Price Each |
| 06462 | 1 | \$25.50 | 06480 | 75 | \$26.50 |
| 06463 | 2 | 25.50 | 06481 | 125 | 26.50 |
| 06464 | 3 | 25.25 | 06482 | 150 | 26.50 |
| 06465 | 5 | 24.75 | 06483 | 300 | 29.75 |
| 06466 | 10 | 24.75 | 06484 | 500 | 33.75 |
| 06467 | 15 | 24.75 | 06485 | 600 | 35.50 |
| 06468 | 25 | 24.75 | 06486 | 750 | 37.25 |
| 06469 | 50 | 26.50 | 77 14 1 | | -1 150 |
| 06470 | 75 | 26.50 | Voltmeters | with a range | above 150 |

27.25

28.00

29.00

29.75

30.50

32.25

volts are provided with external resistances.

> Diameter of case, 9.56 inches. Depth of case, 3.15 inches. Length scale arc, 6.50 inches.

| | 500 | |
|----|-----|-----|
| AM | MET | ERS |

100

150

200

250

300

400

06471

06472

06475

06476

06477

06478

06479

06506 06508

| | AMMETERS | |
|-------|-----------|-------|
| | Model 159 | |
| 06487 | 1 | 19.75 |
| 06488 | 2 | 19.75 |
| 06490 | 2 3 | 19.50 |
| 06491 | 5 | 19.00 |
| 06492 | 10 | 19.00 |
| 06493 | 15 | 19.00 |
| 06494 | 25 | 19.00 |
| 06495 | 50 | 20.75 |
| 06496 | 75 | 20.75 |
| 06497 | 100 | 21.50 |
| 06498 | 150 | 21.50 |
| 06499 | 200 | 22.25 |
| 06500 | 250 | 23.00 |
| 06505 | 300 | 24.00 |
| 06506 | 400 | 24.75 |
| 06508 | 500 | 26.50 |

500

VOLTMETERS

| | Model 159 | |
|-------|-----------|-------|
| 06510 | 75 | 19.75 |
| 06511 | 125 | 19.75 |
| 06512 | 150 | 19.75 |
| 06513 | 300 | 24.00 |
| 06515 | 500 | 26.50 |
| 06848 | 600 | 28.00 |
| 06849 | 750 | 29.75 |
| | | |

Voltmeters with a range above 150 provided with external revolts are sistances.

> Diameter of case, 7.25 inches. Depth of case, 3.15 inches. Length scale arc, 5.25 inches.

FOR ALTERNATING CURRENT MODELS 151 AND 156



Model 151

AMMETERS

250

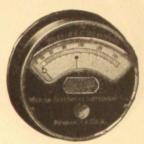
300 400

500

06885

06886

06887 06888



Model 156

VOLTMETERS

Diameter of case, 7.25 inches.

Length of scale arc, 5.25 inches.

Depth of case, 3.15 inches.

The case of each ammeter is provided with a "ground terminal," which must, in order to ensure safety to the user, be connected to earth when the potential difference of circuits exceeds 200 volts. When properly erected, the ammeters are perfectly safe for use on circuits operating on a potential difference of 2300 volts, but must be used with transformers on circuits of higher potential difference.

Transformers must be used on all circuits carrying over 500 amperes, and we recommend a value of 5 amperes for the secondary, and will calibrate the instrument the value of the primary so that the instrument will be direct reading.

| | AMMETERS | | VOLIMETERS | | | | |
|-------|-----------|---------|---|---------------------|--------------|--|--|
| | Model 151 | | | Model 151 | | | |
| Trade | Range | Price | Trade | Range | Price | | |
| No. | Amperes | Each | No. | Volts | Each | | |
| 06850 | 1 | \$29.50 | 06866 | 75 | \$30.50 | | |
| 06851 | 2 | 29.00 | 06867 | 125 | 30.50 | | |
| 06852 | 3 | 28.00 | 06868 | 150 | 31.00 | | |
| 06853 | 5 | 28.00 | 06869 | 300 | 37.25 | | |
| 06854 | 10 | 28.00 | 06870 | 500 | 43.75 | | |
| 06855 | 15 | 28.00 | 06871 | 600 | 45.50 | | |
| 06856 | 25 | 28.00 | 06872 | 750 | 49.50 | | |
| 06857 | 50 | 29.00 | | | | | |
| 06858 | 75 | 29.00 | Voltmeters | with a range abo | ve 300 volts | | |
| 06859 | 100 | 29.00 | are provided with external resistances. | | | | |
| 06860 | 150 | 29.75 | are provided with | ii caternar resisti | alloos. | | |
| 06861 | 200 | 30.50 | D: 4 | 0.50 ! -1 | | | |
| 06862 | 250 | 31.00 | Diameter of case, 9.56 inches. | | | | |
| 06863 | 300 | 31.25 | Depth of case, 3.15 inches. | | | | |
| 06864 | 400 | 32.25 | Length of scale arc, 6.5 inches. | | | | |
| 06865 | 500 | 33.00 | | | | | |
| | AMMETERS | | V | OLTMETERS | | | |
| | Model 156 | | | Model 156 | | | |
| 06873 | 1 | 23.00 | 06889 | 75 | 24.00 | | |
| 06874 | 2 | 22.75 | 06890 | 130 | 24.00 | | |
| 06875 | 2 3 | 22.25 | 06891 | 150 | 24.50 | | |
| 06876 | 5 | 22.25 | 06892 | 300 | 30.50 | | |
| 06877 | 10 | 22.25 | 06893 | 500 | 32.25 | | |
| 06878 | 15 | 22.25 | 06894 | 600 | 34.75 | | |
| | | 22.25 | | | | | |
| 06879 | 25 | 22.75 | 06895 | 750 | 38.75 | | |
| 06880 | 50 | 22.75 | | | | | |
| 06881 | 75 | | Voltmeters | with a range abo | ve 300 volts | | |
| 06882 | 100 | 22.75 | are provided wit | h external resista | ances. | | |
| 06883 | 150 | 23.75 | | | | | |
| 06884 | 200 | 24.25 | D: 1 | -f 7.05 in ab | | | |

24.75

25.50

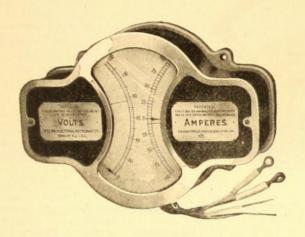
27.25

29.00

WESTON DUPLEX INSTRUMENTS

FOR DIRECT CURRENT

MODELS 38 AND 39



75 VOLTS

150 VOLTS

| Model 38 | Model 39 | | | Model 38 | Model 39 | | |
|------------------|--------------------|------------------------------------|------------------|--------------------|--------------------|---|------------------|
| Trade No. | Trade No. | Range for Amp. Scale in Amperes | | Trade No. | Trade No. | Range for Amp. Scale in Amperes | Price Each |
| 016115 016116 | $016124 \\ 016125$ | 10 25 | \$57.75 57.75 | $016133 \\ 016134$ | $016142 \\ 016143$ | $\begin{array}{c} 10 \\ 25 \end{array}$ | \$57.75 57.75 |
| 016117 | 016126 016127 | 50 100 | 57.75 57.75 | $016135 \\ 016136$ | $016144 \\ 016145$ | 50 100 | 57.75 57.75 |
| 016118 016119 | 016128 016129 | 150 200 | 57.75 65.50 | 016137 016138 | $016146 \\ 016147$ | $\frac{150}{200}$ | 57.75 69.00 |
| 016120 016121 | 016130 | 300 | 66.00 66.50 | 016139 016140 | 016148 016149 | 300 400 | 69.25 69.75 |
| 016122 016123 | $016131 \\ 016132$ | 400 500 | 67.75 | 016141 | 016150 | 500 | 71.00 |

300 VOLTS

| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 016154 | 016163 100 | \$69.00 69.00 69.75 71.00 | | 0101 | - | Pric Eac \$73.5 74.6 74.5 75. |
|--|--------|------------|------------------------------------|--|------|---|-------------------------------|
|--|--------|------------|------------------------------------|--|------|---|-------------------------------|

DIMENSIONS

Model 39.—Length, 9½ inches; width, 7 inches; height or depth, 3¼ inches; weight, 8 pounds. Case made of aluminum.

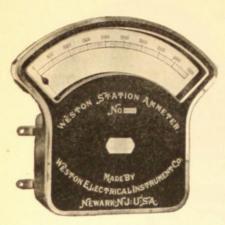
Model 38.—Length, 11 inches; width, 8½ inches; height or depth, 3% inches; weight, 17 pounds. Case made of iron.

Model 39.—Has an aluminum case and was originally designed and was largely used as an automobile instrument. It is therefore practically waterproof, and built to stand, without automobile instrument. It is therefore practically waterproof, and built to stand, without injury, the constant vibration of such vehicles. Suitable for small switchboard work, especially on motor starter switchboards.

WESTON ILLUMINATED-DIAL STATION INSTRUMENTS

MODEL 11

FOR DIRECT CURRENT



Cases for these meters are supplied in two patterns. The one is intended to be attached by means of two brackets directly to and projecting from the front of the switchboard. The other, known as "flush type," is designed to be countersunk so that the front of the instrument is practically flush with the face of the board. The cases are regularly finished in dull black japan.

AMMETERS

| | | Value of Each | Price | Price |
|-------|---------|----------------|-----------------|--------------------|
| Trade | Range | Scale Division | with Shunt Each | Shunt only Each |
| No. | Amperes | in Amperes | \$106.00 | \$5.00 |
| 07060 | 200 | 2 | 106.00 | 5.50 |
| 07061 | 250 | 5 | | |
| 07062 | 300 | 5 | 106.50 | 5.50 |
| 07063 | 400 | 5 | 106.75 | 5.75 |
| 07064 | 500 | 5 | 108.25 | 7.50 |
| 07065 | 600 | 10 | 110.00 | 9.00 |
| 07066 | 750 | 10 | 111.50 | 10.75 |
| 07067 | 1000 | 10 | 113.25 | 12.50 |
| 07068 | 1200 | 20 | 115.00 | 14.00 |
| 07069 | 1500 | 20 | 124.50 | 23.75 |
| 07070 | 2000 | 20 | 131.75 | 30.75 |
| 07071 | 2500 | 50 | 134.50 | 33.50 |
| 07072 | 3000 | 50 | 138.00 | 37.25 |
| 07073 | 3500 | 50 | 143.00 | 42.00 |
| 07074 | 4000 | 50 | 150.50 | 49.50 |
| 07075 | 4500 | 50 | 162.75 | 62.00 |
| 07076 | 5000 | 50 | 175.25 | 74.25 |
| 07077 | 6000 | 100 | 187.50 | 86.75 |
| 07078 | 7000 | 100 | 200.00 | 99.00 |
| 07079 | 8000 | 100 | 224.75 | 123.75 |
| 07080 | 10000 | 100 | 249.50 | 148.50 |

VOLTMETERS

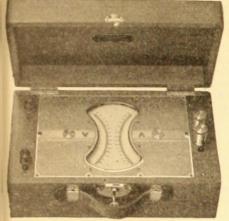
| Trade No. 07081 07082 | Range Volts 130 150 | Value of Each Scale Division in Volts 2 2 | Price Each \$99.00 100.50 | Trade No. 07085 07086 | Range Volts 300 600 | Value of Each Scale Division in Volts 5 | Price Each \$104.25 105.50 |
|--------------------------------|------------------------------|---|------------------------------------|--------------------------------|------------------------------|--|-------------------------------------|
| 07083 | 180 | 2 | 101.75 | 07087 | 750 | 10 | 107.00 |
| 07084 | 250 | 5 | 102.75 | | | | ****** |

These prices are for No. 11 dull black japanned finish.

Flush type supplied at the same prices, if specially ordered.

WESTON INSTRUMENTS

FOR DIRECT CURRENT
MODEL 56 PORTABLE DUPLEX INSTRUMENTS



These duplex instruments consist of a voltmeter and an ammeter combined in one case. The case is of highly finished natural cherry. All connections are made by means of binding posts inside of the case. These posts are plainly marked, showing their polarity and to which side of the instrument they are connected. Regularly supplied with a single-range voltmeter and a single-range ammeter; they will be supplied, however, with either two voltmeter movements or two ammeter movements of like or different ranges, if so desired. The voltmeter side may be obtained with a double range at a slight increase in cost. The ammeter is furnished only in single ranges up to 100 amperes with a self-contained shunt, but if multiple or higher ranges are desired they can be obtained by the use of external shunts. Suitable for all ordinary testing in which a greater degree of accuracy than 1 per cent is not desired.

| | | Range, Amperes | | | | | | | | | | | |
|---|-------|----------------|---------|---------|----------|-----------|---------|--------|---------|----------|---------|----------|---------|
| | | | | | mps. | 25 A | mps. | 50 A: | mps. | 100 A | mps. | 150 A | mps. |
| | | | | | Price | | | | Price | Trade | Price | Trade | Price |
| | Volts | | Each | No. | Each | No. | Each | No. | Each | No. | Each | No. | Each |
| | 75 (| 085384 | \$74.25 | 085390 | \$74.25 | 085396 | \$74.25 | 085402 | \$74.25 | 085408 | \$74.25 | 085414 | \$74.25 |
| | 150 | 085385 | 78.50 | 085391 | 78.50 | 085397 | 78.50 | 085403 | 78.50 | 085409 | 78.50 | 085415 | 78.50 |
| 1 | 300 | 085386 | 82.50 | 085392 | 82.50 | 085398 | 82.50 | 085404 | 82.50 | 085410 | 82.50 | 085416 | 82.50 |
| | 450 | 085387 | 86.75 | 085393 | 86.75 | 085399 | 86.75 | 082405 | 86.75 | 085411 | 86.75 | 085417 | 86.75 |
| | 600 | 085388 | 90.75 | 085394 | 90.75 | 085400 | 90.75 | 082406 | 90.75 | 085412 | 90.75 | 085418 | 90.75 |
| 1 | 750 | 085389 | 99.00 | 085395 | 99.00 | 085401 | 99.00 | 085407 | 99.00 | 085413 | 99.00 | 085419 | 99.00 |
| | | 200 A | mps. | 250 A | mps. | 300 A | mps. | 400 A | mps. | 500 A | mps. | | |
| | 75 | 085420 | | 085426 | | 085432 | | 085438 | | 085444 | 80.75 | | |
| | 150 | 085421 | 83.25 | 085427 | 83.25 | 085433 | 84.00 | 085439 | 84.25 | 085445 | 85.75 | | |
| | 300 | 085422 | 87.50 | 085428 | 87.50 | 085434 | 88.00 | 085440 | 88.25 | 085446 | 90.00 | | |
| | 450 | 085423 | 91.50 | 085429 | 91.50 | 085435 | 92.25 | 085441 | 92.50 | 085447 | 94.00 | | |
| | | 085424 | | 085430 | 95.75 | 085436 | 96.25 | 085442 | 96.50 | 085448 | 98.25 | | |
| 1 | 750 | 085425 | 104.00 | 085431 | 104.00 | 085437 | | | | 085449 | | | |
| | | Prices | will be | uoted u | ipon api | plication | for ran | ges or | combina | tions of | ranges | not incl | uded in |

Prices will be quoted upon application for ranges or combinations of ranges not included in the above list.

If the voltmeter is desired with a double range, add \$5.00 to list price of highest range desired.



Model 251, Voltmeter



Model 251, Ammeter

MODEL 251 SWITCHBOARD INSTRUMENTS

For use on exciter panels and other direct current panels, which may form a part of an alternating current switchboard, a special form of permanent magnet moving coil instrument has been developed. These instruments are mounted in sheet metal cases having the same design and base and front dimensions as the Weston A. C. Wattmeters, etc. The scales are drawn to harmonize with those used on the A. C. soft iron voltmeters.

| VOITHERE | 113. | Voltm | eters | | 7. |
|--------------------|------------------|------------------|------------------|----------------|------------------|
| Trade | Range Volts | Price Each | Trade No. | Range Volts | Price Each |
| No. 085450 | 125 | \$46.75 | 085453 | 300 | \$53.75 |
| 085451 | 150 | 48.75 52.00 | 085454 085455 | 600 750 | 57.75 61.00 |
| 085452 | 250 | Amm | | Range | Price |
| Trade No. | Range Amperes | Price Each | No. | Amperes | Each |
| 085456 | 5 | \$41.25 | 085464 085465 | 200 250 | \$46.25 46.75 |
| 085457 | 10 15 | $41.25 \\ 41.25$ | 085466 | 300 | 46.75 |
| 085458 085459 | 25 | 41.25 | 085467 085468 | 400 500 | 47.00 48.75 |
| 085460 | 50 75 | 42.00 43.00 | 085469 | 600 | 50.25 |
| $085461 \\ 085462$ | 100 | 43.75 | 085470 | 750 | 52.00 |
| 085463 | 150 | 44.50 Dimer | nsions | f 97 | / inches: |

Diameter of case, 95% inches; depth of case, 37% inches; length of scale arc, 65% inches.

FOR DIRECT CURRENT AND SINGLE-PHASE CIRCUITS



Model 167 Single-phase Wattmeter

WATTMETERS, MODEL 167

These wattmeters may be used with equal accuracy and without change of calibration, on direct current circuits or single-phase alternating current circuits of any frequency, power-factor or wave form, within the limits of usual commercial practice. The scale is uniform throughout the entire range of deflection.

All ranges are back-connected. Meters above 300 volts range have external resistance box. For ranges above 750 volts, both current and potential transformers are used, and for current ranges above 100 amperes current transformers must be used. For use with current transformers, the 5-ampere range instrument is recommended. These instruments may also be had in full flush cases for a slight extra charge.

100 to 150 Volts

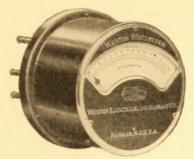
| Trade No. | Range Amperes | Scale | Price Each | Trade No. | Range Amperes | Scale | Price Each | | | | |
|------------------|------------------|-----------|---------------|--------------|------------------|---------|---------------|--|--|--|--|
| 085491 | 1 | 150 watts | \$68.75 | 085497 | 20 | 2 kw. | \$68.75 | | | | |
| 085492 | 2 | 300 watts | 68.75 | 085498 | 20 | 3 kw. | 68.75 | | | | |
| 085493 | 5 | 500 watts | 68.75 | 085499 | 50 | 5 kw. | 68.75 | | | | |
| 085494 | 5 | 750 watts | 68.75 | 085500 | 50 | 7.5 kw. | 68.75 | | | | |
| 085495 | 10 | 1 kw. | 68.75 | 085501 | 100 | 10 kw. | 77.00 | | | | |
| 085496 | 10 | 1.5 kw. | 68.75 | 085502 | 100 | 15 kw. | 77.00 | | | | |
| 000430 | 10 | 1.0 KW. | 00.10 | 000002 | | 10 11. | | | | | |
| 200 to 300 Volts | | | | | | | | | | | |
| 085503 | 1 | 300 watts | 77.00 | 085510 | 20 | 6 kw. | 77.00 | | | | |
| 085504 | 2 | 600 watts | 77.00 | 085511 | 20 | 7.5 kw. | 77.00 | | | | |
| 085505 | 5 | 1 kw. | 77.00 | 085512 | 50 | 10 kw. | 77.00 | | | | |
| 085506 | 5 | 1.5 kw. | 77.00 | 085513 | 50 | 15 kw. | 77.00 | | | | |
| 085507 | 10 | 2 kw. | 77.00 | 085514 | 100 | 20 kw. | 84.00 | | | | |
| 085508 | 10 | 3 kw. | 77.00 | 085515 | 100 | 30 kw. | 84.00 | | | | |
| 085509 | 20 | 4 kw. | 77.00 | | | ******* | | | | | |
| | 400 to 600 Volts | | | | | | | | | | |
| | | | 400 00 | 000 10163 | | | | | | | |
| 085516 | 1 | 600 watts | 84.00 | 085522 | 20 | 8 kw. | 84.00 | | | | |
| 085517 | 2 | 1.2 kw. | 84.00 | 085523 | 20 | 12 kw. | 84.00 | | | | |
| 085518 | 5 | 2 kw. | 84.00 | 085524 | 50 | 20 kw. | 84.00 | | | | |
| 085519 | 5 | 3 kw. | 84.00 | 085525 | 50 | 30 kw. | 84.00 | | | | |
| 085520 | 10 | 4 kw. | 84.00 | 085526 | 100 | 49 kw. | 92.25 | | | | |
| 085521 | 10 | 6 kw. | 84.00 | 085527 | 100 | 60 kw. | 92.25 | | | | |
| | | | | | | | | | | | |
| | | | 600 to | 750 Volts | | | | | | | |
| 985528 | 1 | 750 watts | 92.25 | 085534 | 20 | 10 kw. | 92.25 | | | | |
| 085529 | 2 | 1.5 kw. | 92.25 | 085535 | 20 | 15 kw. | 92.25 | | | | |
| 085530 | 5 | 2.5 kw. | 92.25 | 085536 | 50 | 25 kw. | 92.25 | | | | |
| 085531 | 5 | 4 kw. | 92.25 | 085537 | 50 | 40 kw. | 92.25 | | | | |
| 085532 | 10 | 5 kw. | 92.25 | 085538 | 100 | 50 kw. | 103.25 | | | | |
| 085533 | 10 | 7.5 kw. | 92.25 | 085539 | 100 | 75 kw. | 103.25 | | | | |
| 000000 | 10 | I.O KW. | 02.20 | 000000 | 100 | TO ATT. | 100,120 | | | | |

Dimensions

Diameter of case, 95% inches; depth of case, 37% inches; length of scale arc, 65% inches.

FOR POLYPHASE CIRCUITS

WATTMETERS, MODEL 216



Model 216, Full-front Type Polyphase Wattmeter



Model 216, Semi-flush Type Polyphase Wattmeter

These wattmeters may be used with equal accuracy and without change of calibration, on direct current circuits or alternating current circuits of any frequency, power-factor or wave form, within the limits of usual commercial practice. The scale is uniform throughout

These instruments have precisely the same characteristics as Model 167. All ranges are back-connected. Meters above 300 volts range have external resistance box. For ranges above 750 volts, both current and potential transformers are used, and for current ranges above 100 amperes current transformers must be used. For use with current transformers, the 5-ampere range instrument is recommended. They are regularly furnished with either one of two styles of case, namely: Full-front, and semi-flush. The semi-flush type projects beyond the front of the board just sufficiently to bring the front of the instrument in the same plane with other Weston A. C. Switchboard Instruments. Full flush instruments may be had at slight extra cost.

| had at sli | ght extra | cost. | 100 to 1 | 50 Volts | | | |
|------------|--------------|--------------------|------------|-----------|----------|------------------|------------|
| | | | Price | Trade | Range | Scale | Price |
| Trade | Range | Scale Kilowatts | Each | No. | Amperes | Kilowatts | Each |
| No. | Amperes | Kilowatts | \$96.25 | 085566 | 20 | 7.5 | \$96.25 |
| 085560 | 5 | 1 | | 085567 | 50 | 10 | 96.25 |
| 085561 | 5 | 1.5 | 96.25 | 085568 | 50 | 15 | 96.25 |
| 085562 | 10 | 2 | 96.25 | 085569 | 100 | 20 | 103.25 |
| 085563 | 10 | 3 | 96.25 | 085570 | 100 | 30 | 103.25 |
| 085564 | 20 | 4 | 96.25 | | | | |
| 085565 | 20 | 6 | 96.25 | | | | |
| | | | 200 to 3 | 00 Volts | | | |
| | | | | 085576 | 20 | 12 | 103.25 |
| 085571 | 5 | 2 | 103.25 | 085577 | 50 | 20 | 103.25 |
| 085572 | 5 | 3 | 103.25 | 085578 | 50 | 30 | 103.25 |
| 085573 | 10 | 4 | 103.25 | 085579 | 100 | 40 | 110.00 |
| 085574 | 10 | 6 | 103.25 | | 100 | 60 | 110.00 |
| 085575 | 20 | 8 | 103.25 | 085580 | 100 | | |
| 000010 | 20 | | 400 to 6 | 500 Volts | | | |
| | | | 400 to 6 | | 20 | 30 | 110.00 |
| 00==01 | - | 4 | 110.00 | 085586 | 50 | 40 | 110.00 |
| 085581 | 5 | 6 | 110.00 | 085587 | 50 | 60 | 110.00 |
| 085582 | | 8 | 110.00 | 085588 | 100 | 80 | 117.00 |
| 085583 | 10 | 12 | 110.00 | 085589 | 100 | 120 | 117.00 |
| 085584 | 10 | | 110.00 | 085590 | 100 | 120 | |
| 085585 | 20 | 20 | | | | | |
| | | | 600 to | 750 Volts | ~~ | 30 | 117.00 |
| | | | 117 00 | 085596 | 20 | | 117.00 |
| 085591 | 5 | 5 | 117.00 | 085597 | 50 | 50 | 117.00 |
| 085592 | 5 | 7.5 | 117.00 | 085598 | 50 | 75 | 123.75 |
| 085593 | 10 | 10 | 117.00 | 085599 | 100 | 100 | 123.75 |
| 085594 | 10 | 15 | 117.00 | 085600 | 100 | 150 | 120.10 |
| 085595 | 20 | 20 | 117.00 | | | | Length of |
| 000000 | | | Dim | ensions | SIZE, CA | SE, INCHES | Scale Arc- |
| | | | | | Diam. | Depth | |
| | Kind of 1 | Instrument | | | 911/6 | $6\frac{11}{32}$ | 65/8 |
| T 11 0 | Kind of I | oso 5 to 20 | amperes | | | $6\frac{11}{32}$ | 65/8 |
| Full-fron | t, three-ph | ase, 50 to 1 | 00 amperes | | 911/6 | $6\frac{11}{32}$ | 65/8 |
| Full-fron | it, three-ph | 1ase, 5 to 20 1 | amperes | | | | |
| Full-fron | it, two-pha | se, 5 to 20 t | | | | | |
| 1 | | | | | | | |

FOR ALTERNATING CURRENT

SYNCHROSCOPES MOT

GLOW - PAS,

Model 226 Synchroscope

SYNCHROSCOPES, MODEL 226

100 to 125 Volts

Consist of a phase angle indicator mounted with its pointer behind a ground glass, and illuminated by a small synchronizing lamp installed behind the pointer and connected to synchronize light. A difference in frequency between two machines causes the pointer to swing back and forth, but owing to the fact that the lamp is lighted only half the time the pointer is seen only during every other swing, and thus appears to rotate continuously in one direction. When the machines have the same frequency but are out of phase, the pointer comes to rest at one side or the other of the middle of the scale. Perfect synchronism is indicated by the pointer remaining at rest in the middle of the scale with the lamp lighted. The indications are absolutely infallible.

Dimensions

Every synchroscope includes a lamp transformer, a condenser and a resistor mounted in a separate box. When used for other voltages than 100 to 125, potential transformers must be used. Can be calibrated for any frequency.

| Trade No. | Combon | Price Each | Trade No. | Cycles | Price Each |
|--------------|--------------|-----------------------|----------------------|--------------------|---------------|
| 084946 | Cycles 25 | \$86.00 | 084948 | 50 | \$86.00 |
| 084947 | 40 | 86.00 | 084949 | 60 | 86.00 |
| | of case, 95% | inches; depth of case | , 378 inches; length | of scale arc, 65/8 | inches. |

POWER-FACTOR METERS, MODEL 215



Model 215 Power-Factor Meter

These instruments indicate, from 2/10 load to full load, the true phase angle to within 1 per cent, independent of any variable conditions found on ordinary commercial circuits. Polyphase meters may be used on any conmercial frequency. Single-phase meters require a phase-splitting device, and therefore must be calibrated for the frequency at which they are to operate. Specify frequency when ordering.

Polyphase meters are arranged for the following systems: two-phase, three-wire; and three-phase, three-wire balanced loads, Meters above 150-volt range are equipped with external resistance box. All meters have the same kind of scale, reading from 0.50 lag to 0.50 lead. Special scales for power-factors as low as 0.30 may be had at slight extra cost. May also be arranged as reactive factor meters.

Polyphase 400-600 V. 600-750 V. 100-150 V. 200-300 V. Trade No. Trade Price Range Trade Amperes Scale Each \$75.75 75.75 \$103.25 5-1-5 \$82.50 \$96.25 084965 084950 084955 084960 82.50 96.25 084966 103 25 10 5-1-5 084951 084956 084961 084962 103.25 084967 110.00 20 5-1-5 084952 82.50 084957 89.50 103.25 50 084968 110.00 5-1-5 084953 82.50 084958 89.50 084963 084969 117.00 084954 96.25 084964 110.00 100 89.50 084959

Price of single-phase meters, including auxiliary device for splitting the phase, is \$13.75 more than the corresponding range polyphase meter listed above. When ordering single phase meters, always specify the frequency.



Model 214 Frequency Meter

Diameter of case, 95% inches; depth of case, 37% inches; length of scale arc, 65% inches.

The indications are independent of changes of temperature voltage and wave form, such as may be encountered in the commercial circuits of to-day. Made for use on 110 and 220 volt circuits. For voltage ranges outside of this, potential transformers must be used. Every frequency meter is provided with an external

box, which contains reactors and resistors. Trade No. Price Each Trade No. Cycles Each \$82.50 60 084971 25 \$82.50 084973 82.50 084972 40 82.50 084974 125 084976 50 82.50 084975 133

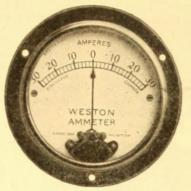
For 220-volt instrument add \$7.00 to above prices.

WESTON AUTOMOBILE INSTRUMENTS

MODELS 301 AND 354



Model 301-Surface Type



Model 354-Flush Type

MODEL 301

These instruments are specially built for the cowl or dashboard with a full knowledge of the exacting requirements of automobile and motor boat service.

They are designed for continuous reliability, operate upon the permanent magnet movable coil principle, and like all other Weston models, are constructed with the most conscientious regard for the service for which they are intended.

Model 301 instruments are made in two styles of cases, surface type and flush type.

Surface type: Diameter of case, 2.75 inches. Depth of case, 1.234 inches. Length of scale 2.35 inches.

Flush type: Diameter of case, 3.25 inches. Depth of case, 1.171 inches. Length of scale, 2.35 inches.

Finished either in dead black japan or nickel.

AMMETERS-ZERO LEFT

| Surface Type | | | | Surface Type | Flush Type Trade | | Price | | | |
|----------------------|--------------|-----------|---------------|--------------|---------------------|---------|--------|--|--|--|
| Trade No. | Trade No. | Range | Price Each | No. | No. | Range | Each | | | |
| | | | \$8.00 | 115888 | 115907 | 0-8 | \$8.00 | | | |
| 115846 | 115867 | 0-1 | 8.00 | 115889 | 115908 | 0-10 | 8.00 | | | |
| 115847 | 115868 | 0-1.5 | | 115890 | 115909 | 0-12 | 8.00 | | | |
| 115848 | 115869 | 0-2 | 8.00 | | 115910 | 0-15 | 8.00 | | | |
| 115849 | 115870 | 0-2.5 | 8.00 | 115891 | 115911 | 0-20 | 8.00 | | | |
| 115850 | 115871 | 0-3 | 8.00 | 115892 | 115911 | 0-25 | 8.00 | | | |
| 115851 | 115872 | 0-4 | 8.00 | 115893 | | 0-30 | 8.00 | | | |
| 115852 | 115873 | 0-5 | 8.00 | 115894 | 115913 | 0-50 | 0.00 | | | |
| AMMETERS—ZERO CENTER | | | | | | | | | | |
| 115853 | 115874 | 1-0-1 | 8.00 | 115895 | 115914 | 10-0-10 | 8.00 | | | |
| 115854 | 115875 | 1.5-0-1.5 | 8.00 | 115934 | 115935 | 10-0-30 | 8.00 | | | |
| 115855 | 115876 | 2-0-2 | 8.00 | 115896 | 115915 | 15-0-15 | 8.00 | | | |
| 115856 | 115877 | 3-0-3 | 8.00 | 115897 | 115916 | 20-0-20 | 8.00 | | | |
| 115857 | 115878 | 5-0-5 | 8.00 | 115898 | 115917 | 30-0-30 | 8.00 | | | |
| 110001 | 110010 | VOLT | | ZERO LEF | T | | | | | |
| | | | | 115899 | 115918 | 0-10 | 8.00 | | | |
| 115858 | 115879 | 0-1 | 8.00 | 115900 | 115919 | 0-12 | 8.00 | | | |
| 1.15859 | 115880 | 0-1.5 | 8.00 | 115901 | 115920 | 0-15 | 8.00 | | | |
| 15860 | 115881 | 0-2 | 8.00 | 115902 | 115921 | 0-20 | 8.00 | | | |
| 15861 | 115882 | 0-2.5 | 8.00 | 115903 | 115922 | 0-25 | 8.00 | | | |
| 15862 | 115883 | 0-3 | 8.00 | 115904 | 115923 | 0-30 | 8.00 | | | |
| 115863 | 115884 | 0-4 | 8.00 | 115904 | 115924 | 0-40 | 8.00 | | | |
| 15864 | 115885 | 0-5 | 8.00 | | 115925 | 0-50 | 8.00 | | | |
| 15865 | 115886 | 0-8 | 8.00 | 115906 | | | | | | |
| 1 | | VOLTM | ETERS-Z | ERO CENT | ER | | | | | |
| 15866 | 115887 | 3-0-3 | 8.00 | | ***** | | | | | |
| 110000 | 110001 | | MODEL | 354 | | | 1 | | | |

Designed expressly for use on the dashboard of automobiles, motor boats or motor-cycles quipped with electric starting and lighting devices. The mechanical workmanship is of the lighest grade and the electrical physical electrical physical electrical el ighest grade and the electrical characteristics are such that the instrument may be depended pon to give perfect satisfaction and reliable indications under the extremely severe conditions I automobile service. Made in flush type, diameter over flange $2\frac{35}{64}$ inches, and in surface type,

4.25 20-0-20 iameter, 213 inches. 115932 115930 4.25 115928 10-0-10 30-0-30 15926 115933 115931 4.25 15-0-15 15927 115929

FOR ALTERNATING CURRENT

SYNCHROSCOPES, MODEL 226

100 to 125 Volts



Model 226 Synchroscope

Consist of a phase angle indicator mounted with its pointer behind a ground glass, and illuminated by a small synchronizing lamp installed behind the pointer and connected to synchronize light. A difference in frequency between two machines causes the pointer to swing back and forth, but owing to the fact that the lamp is lighted only half the time the pointer is seen only during every other swing, and thus appears to rotate continuously in one direction. When the machines have the same frequency but are out of phase, the pointer comes to rest at one side or the other of the middle of the scale. Perfect synchronism is indicated by the pointer remaining at rest in the middle of the scale with the lamp lighted. The indications are absolutely infallible.

Dimensions

Every synchroscope includes a lamp transformer, a condenser and a resistor mounted in a separate box. When used for other voltages than 100 to 125, potential transformers must be used. Can be calibrated for any frequency.

| Trade | | Price | Trade | | Price |
|--------|---------------------|-----------------------|---------------------|------------------------------|---------|
| No. | Cycles | Each | No. | Cycles | Each |
| 084946 | 25 | \$86.00 | 084948 | 50 | \$86.00 |
| 084947 | 40 | 86.00 | 084949 | 60 | 86.00 |
| Diamet | er of case, 95/8 in | iches; depth of case, | 37/8 inches; length | of scale arc, $6\frac{5}{8}$ | inches. |

POWER-FACTOR METERS, MODEL 215

These instruments indicate, from 2/10 load to full load, the true phase angle to within 1 per cent, independent of any variable conditions found on ordinary commercial circuits. Polyphase meters may be used on any conmercial frequency. Single-phase meters require a phase-splitting device, and therefore must be calibrated for the frequency at which they are to operate. Specify frequency when ordering.

Polyphase meters are arranged for the following systems: two-phase, three-wire; and three-phase, three-wire balanced loads, Meters above 150-volt range are equipped with external resistance box. All meters have the same kind of scale, reading from 0.50 lag to 0.50 lead. Special scales for power-factors as low as 0.30 may be had at slight extra cost. May also be arranged as reacting for the process of the same kind of scale, reading from 0.50 lag to 0.50 lead.

tive factor meters.



Model 215 Power-Factor Meter

| | | 100-18 | 50 V. | 200- | 300 V. | 400- | 600 V. | 600 | -750 V. |
|------|------------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|
| Rang | ge eres Scale | Trade No | Price Each | Trade No. | Price Each | Trade No. | Price Each | Trade No. | Price Each |
| 5 | 5-1-5 | 084950 | \$75.75 | 084955 | \$82.50 | 084960 | \$96.25 | 084965 | \$103.25 |
| 10 | 5-1-5 | 084951 | 75.75 | 084956 | 82.50 | 084961 | 96.25 | 084966 | 103.25 |
| 20 | 5-1-5 | 084952 | 82.50 | 084957 | 89.50 | 084962 | 103.25 | 084967 | 110.00 |
| 50 | 5-1-5 | 084953 | 82.50 | 084958 | 89.50 | 084963 | 103.25 | 084968 | 110.00 |
| 100 | 5-1-5 | 084954 | 89.50 | 084959 | 96.25 | 084964 | 110.00 | 084969 | 117.00 |
| | Price of | single-phose | matara | including | ouviliony. | daviga for | colitting | the phase | ie \$13.75 |

Polyphase

Price of single-phase meters, including auxiliary device for splitting the phase, is \$13.75 more than the corresponding range polyphase meter listed above. When ordering single phase meters, always specify the frequency.

WESTON
WESTON ELECTROSIL INSTRUMENT CO.
NEMATOR N. J. S. S.

Model 214 Frequency Meter

Diameter of case, 95% inches; depth of case, 37% inches; length of scale arc, 65% inches.

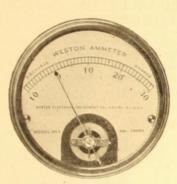
The indications are independent of changes of temperature voltage and wave form, such as may be encountered in the commercial circuits of to-day. Made for use on 110 and 220 volt circuits. For voltage ranges outside of this, potential transformers must be used. Every frequency meter is provided with an external box, which contains reactors and resistors.

Trade No. Price Each Trade No. Price Each Cycles Cycles \$82.50 084971 25 \$82.50 60 084973 084972 82.50 125 82.50 40 084974 82.50 82.50 084976 50 084975

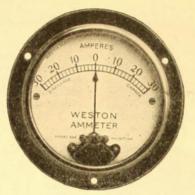
For 220-volt instrument add \$7.00 to above prices.

WESTON AUTOMOBILE INSTRUMENTS

MODELS 301 AND 354



Model 301-Surface Type



Model 354-Flush Type

MODEL 301

These instruments are specially built for the cowl or dashboard with a full knowledge of the exacting requirements of automobile and motor boat service.

They are designed for continuous reliability, operate upon the permanent magnet movable coil principle, and like all other Weston models, are constructed with the most conscientious regard for the service for which they are intended.

Model 301 instruments are made in two styles of cases, surface type and flush type.

Surface type: Diameter of case, 2.75 inches. Depth of case, 1.234 inches. Length of scale 2.35 inches.

Flush type: Diameter of case, 3.25 inches. Depth of case, 1.171 inches. Length of scale, 2.35 inches.

Finished either in dead black japan or nickel.

AMMETERS-ZERO LEFT

| | Surface Type | | | | Surface Type | Flush Type Trade | | Price |
|---|--------------|--------------|-----------|---------------|--------------|---------------------|---------|--------------|
| | Trade No. | Trade No. | Range | Price Each | Trade No. | No. | Range | Each |
| | | | 0-1 | \$8.00 | 115888 | 115907 | 0-8 | \$8.00 |
| | 115846 | 115867 | | 8.00 | 115889 | 115908 | 0-10 | 8.00 |
| | 115847 | 115868 | 0-1.5 | 8.00 | 115890 | 115909 | 0-12 | 8.00 |
| | 115848 | 115869 | 0-2 | 8.00 | 115891 | 115910 | 0-15 | 8.00 |
| | 115849 | 115870 | 0-2.5 | 8.00 | 115892 | 115911 | 0-20 | 8.00 |
| | 115850 | 115871 | 0-3 | 8.00 | 115893 | 115912 | 0-25 | 8.00 |
| | 115851 | 115872 | 0-4 | 8.00 | 115894 | 115913 | 0-30 | 8.00 |
| | 115852 | 115873 | 0-5 | | | | 0 00 | |
| | | | AMMI | ETERS—ZE | RO CENTI | | 10-0-10 | 8.00 |
| | 115853 | 115874 | 1-0-1 | 8.00 | 115895 | 115914 | 10-0-10 | 8.00 |
| 1 | 115854 | 115875 | 1.5-0-1.5 | 8.00 | 115934 | 115935 | 15-0-15 | 8.00 |
| - | 15855 | 115876 | 2-0-2 | 8.00 | 115896 | 115915 | 20-0-20 | 8.00 |
| 1 | 15856 | 115877 | 3-0-3 | 8.00 | 115897 | 115916 | 30-0-30 | 8.00 |
| 1 | 15857 | 115878 | 5-0-5 | 8.00 | 115898 | 115917 | 30-0-30 | 0.00 |
| | | | VOLT | METERS- | ZERO LEF | T | | 0 00 |
| i | 15858 | 115879 | 0-1 | 8.00 | 115899 | 115918 | 0-10 | 8.00 |
| | 15859 | 115880 | 0-1.5 | 8.00 | 115900 | 115919 | 0-12 | 8.00 |
| | 15860 | 115881 | 0-2 | 8.00 | 115901 | 115920 | 0-15 | 8.00 8.00 |
| 1 | 15861 | 115882 | 0-2.5 | 8.00 | 115902 | 115921 | 0-20 | 8.00 |
| | 15862 | 115883 | 0-3 | 8.00 | 115903 | 115922 | 0-25 | 8.00 |
| 1 | 15863 | 115884 | 0-4 | 8.00 | 115904 | 115923 | 0-30 | 8.00 |
| | 15864 | 115885 | 0-5 | 8.00 | 115905 | 115924 | 0-40 | 8.00 |
| | 15865 | 115886 | 0-8 | 8.00 | 115906 | 115925 | 0-50 | 0.00 |
| - | 19909 | 110000 | | ETERS-Z | ERO CENT | ER | | |
| | 15000 | 115007 | 3-0-3 | 8.00 | | | | |
| | 15866 | 115887 | 0-0-0 | MODEL | | | | , |

Designed expressly for use on the dashboard of automobiles, motor boats or motor-cycles quipped with electric starting and lighting devices. The mechanical workmanship is of the lighest grade and the electric starting and lighting devices. ighest grade and the electrical characteristics are such that the instrument may be depended pon to give perfect satisfaction and reliable indications under the extremely severe conditions f automobile service. Made in flush type, diameter over flange $2\frac{35}{64}$ inches, and in surface type,

| iameter, $2\frac{13}{64}$ inches. | | | 115930 | 115932 | 20-0-20 | 4.25 |
|-----------------------------------|---------|------|--------|--------|---------|------|
| 15926 115928 | 10-0-10 | 4.25 | 115931 | 115933 | 30-0-30 | 4.25 |

WESTON MINIATURE PRECISION INSTRUMENTS

FOR DIRECT CURRENT



Model 267 Voltmeter Front View

MODEL 267 SWITCHBOARD VOLTMETERS, AMMETERS AND MILLIAMMETERS

This group of instruments consists of a variety of ranges of smal switchboard ammeters and voltmeters, suitable for use in small iso lated lighting plants, small power plants, signal systems, battery charging panels, and for all kinds of service where small switchboard indicating instruments are needed.

Voltmeters

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| | - | 8 | | |

Model 267 Voltmeter Rear View

| Trade No. Range | Price Each | Trade No. | Price Range Each | Trade No. | Range Each |
|--------------------|---------------|--------------|---------------------|--------------|------------|
| 084867 1 | \$16.25 | 084876 | 7.5 \$16.25 | 084885 | 50 \$16.25 |
| 084868 1.2 | 16.25 | 084877 | 8 16.25 | 084886 | 60 16.25 |
| 084869 1.5 | 16.25 | 084878 | 10 16.25 | 084887 | 75 16.25 |
| 084870 2 | 16.25 | 084879 | 12 16.25 | 084888 | 80 16.25 |
| 084871 2.5 | 16.25 | 084880 | 15 16.25 | 084889 | 100 16.25 |
| 084872 3 | 16.25 | 084881 | 20 16.25 | 084890 | 120 16.25 |
| 084873 4 | 16.25 | 084882 | 25 16.25 | 084891 | 130 16 25 |
| 084874 5 | 16.25 | 084883 | 30 16.25 | 084892 | 150 16.25 |
| 084875 6 | 16.25 | 084884 | 40 16.25 | | |

Ammeters

| 084893 | 1 | 16.25 | 084899 | 4 | 16.25 | 084905 | 12 | 16.25 |
|--------|-----|-------|--------|-----|-------|--------|----|-------|
| 084894 | 1.2 | 16.25 | 084900 | 5 | 16.25 | 084906 | 15 | 16.25 |
| 084895 | 1.5 | 16.25 | 084901 | 6 | 16.25 | 084907 | 20 | 16.25 |
| 084896 | 2 | 16.25 | 084902 | 7.5 | 16.25 | 084908 | 25 | 16.25 |
| 084897 | 2.5 | 16.25 | 084903 | 8 | 16.25 | 084909 | 30 | 16.25 |
| 084898 | 3 | 16.25 | 084904 | 10. | 16.25 | | | |



Model 267 Ammeter Front View

Ammeters with External Shunts

For high ampere readings, Model 267 will be furnished as a millivoltmeter adjusted to external shunts. Information and prices relative to such instruments will be supplied upon application.



Model 267 Ammeter Rear View

Dimensions

Vertical, 3.35 inches; horizontal, 4.1 inches; depth, 1.1 inches.



Model 268 Front View

MODEL 268 SWITCHBOARD VOLTAMMETERS

Adapted for use in electrolytic work, charging and discharging small storage batteries, and for service in connection with direct current ignition systems for gas and gasoline engines, and in all classes of work in which a single instrument is necessary for indicating either potential difference or current.

| Trade | RA | NGE | Price | Trade | RA | NGE | |
|--------|----------|----------|---------|--------|---------|---------|---------|
| No. | Volts | Amperes | Each | No. | Volts | Amperes | Each |
| 084910 | 10-0-15 | 10-0-15 | \$24.75 | 084918 | 5-0-15 | 10-0-30 | \$24.75 |
| 084911 | 10-0-15 | 2-0-3 | 24.75 | 084919 | 5-0-10 | 5-0-10 | 24.75 |
| 084912 | 10-0-15 | 20-0-30 | 24.75 | 084920 | 10-0-20 | 2-0-4 | 24.75 |
| 084913 | 7.5-0-15 | 7.5-0-15 | 24.75 | 084921 | 5-0-10 | 1-0- 2 | 24.75 |
| 084914 | 7.5-0-15 | 15-0-30 | 24.75 | 084922 | 5-0-10 | 10-0-20 | 24.75 |
| 084915 | 7.5-0-15 | 1.5-0-3 | 24.75 | 084923 | 10-0-20 | 5-0-10 | 24.75 |
| 084916 | 1.5-0-3 | 7.5-0-15 | 24.75 | 084924 | 10-0-20 | 1-0- 2 | 24.75 |
| 084917 | 5-0-15 | 1-0-3 | 24.75 | 084925 | 10-0-20 | 10-0-20 | 24.75 |
| | | | | | | | |



Model 268 Rear View

Dimensions

Vertical, 4.25 inches; horizontal, 4.2 inches; depth, 1.35 inches.

WESTON MINIATURE PRECISION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 280-PORTABLE INSTRUMENTS



Single Range Voltmeter

These instruments are all the same size and can be carried in an ordinary coat pocket. They are made in a great variety of ranges and are admirably adapted to all kinds of commercial and experimental testing that falls within their limits of e.m.f. and current.



Triple Range Ammeter

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Triple Range Voltmeter

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| | 085079 085080 085081 | $\frac{1}{1.2}$ $\frac{1}{1.5}$ |

| S | in | gl | e l | R | a | n | g | е |
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| | Amme | ter | |
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| D | 0 | u | b | le | R | a | n | g | e |
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| | 1 | A. | m | m | e | te | r | | |

| | | | | omere v | ange minny | oremeter | | | |
|----|--------------------|-------------|--------|-----------------|--|----------|---|----------------|----------------|
| | Trade | Range | | Trade | | Price | Trade | Range | Price |
| | 085002 | | | | 120 | | No. | Range | |
| 1 | 085002 | 60 | 18 75 | 000001 | 120 | 18 75 | 085012 | 300 | \$18.75 |
| ı | 085004 | 60 75 | 18 75 | 005000 | 150 | 18 75 | 000010 | 500 | 18.75 18.75 |
| B | 085004 | 60 | 18 55 | 000000 | 190 | 18 75 | 000014 | 900 | 18.75 |
| i | 085006 | 80 100 | 18 75 | 000010 | 130 150 200 250 | 18 75 | 085016 | 750 | 18.75 |
| H | 083000 | 100 | 10.70 | | | | 099010 | 190 | 10.10 |
| ı | 005017 | 1 | 10 75 | | Range Vol | | 085035 | 50 | 18.75 |
| ă | 085017 | 1.2 | -0 | 085026 | Ò | | 085036 | 60 | 18.75 |
| ı | 085018 | | 10.75 | 085027 085028 | 10 | | 085037 | 75 | 18.75 |
| , | 085019 | 1.5 | 10 75 | 005000 | 10 | 10 75 | 085038 | 80 | 18.75 |
| | 085020 | 2 2.5 | 10.75 | 000020 | 15 20 25 30 | 18 75 | 085030 | 100 | |
| | 085021 | 0 | 18 75 | 085030 | 20 | 18 75 | $\begin{array}{c} 085039 \\ 085040 \\ 085041 \\ 085042 \end{array}$ | 100 120 | 18.75 |
| | $085022 \\ 085023$ | 3 | 18 75 | 085031 | 25 | 18 75 | 085041 | 130 | 18.75 |
| | | 4 5 | 18 75 | 0000002 | 30 | 18 75 | 085042 | 150 | |
| | 085024 | 4 5 6 | 18 75 | 085034 | 40 | 18 75 | | | |
| ١ | 085025 | 0 | 10.10 | | Range Vol | | | | |
| ı | | 20.0 | 01 75 | Double | Range voi | 21 75 | 095040 | 80-8 | 21.75 |
| ı | 085043 | | 21.75 | 085045 | 30-3 50-2.5 | 21.75 | 085050 | 100-10 | 21.75 |
| ij | 085044 | | | 085047 | 50-2.5 | 21.75 | 085051 | 150-15 | 21.75 |
| ı | 085045 | 25-2.5 | 21.75 | | 50-5 | | 000001 | 100-10 | 21.10 |
| ı | | | | Triple | Range Vol | tmeters | 005000 | 1 00 00 | 04 75 |
| ı | 085052 | 25-10-2.5 | 24.75 | 085056 | 40-20- 4 | 24.75 | 085060 | 100 95 9 5 | 24.75 |
| ı | 085053 | 30- 3-1.5 | | 085057 | 50- 5-2.5 | 24.75 | 085061 | 100-25-2.5 | 24.75 24.75 |
| - | 085054 | 30- 6-3 | 24.75 | 085058 | 50-25-5 | 24.75 | 085062 | 150 15 2 | 24.75 |
| | | 30-15-3 | 24.75 | 085059 | 50-25-5 50-25-10 | 24.75 | 085063 | 190-19-9 | 24.70 |
| | | | 2 | Single Ra | ange Millia | mmeter | S | 200 | 18.75 |
| | 085064 | 50 | 18.75 | 085069 | 120 130 150 200 | 18.75 | 085074 | 300 | 18.75 |
| | 085065 | 0.0 | 18.75 | 085070 | 130 | 18.75 | 085076 | 400 500 | 18.75 |
| 1 | 085066 | | 18.75 | 085071 | 150 | 18.75 | $085076 \\ 085077$ | 600 | 18.75 |
| N | 085067 | 00 | 18.75 | 085072 | 200 | 18.75 | 085078 | 750 | 18.75 |
| N | 085068 | | 18.75 | 099019 | 200 | 10.00 | 000010 | 100 | 10.10 |
| ă | | | | Single | Range Am | meters | 005001 | 19 | 18.75 |
| N | 085079 | 1 | 18.75 | 085085 | 4 5 | 18.75 | 085091 | 15 | 18.75 |
| ij | 085080 | - 0 | 18.75 | 085086 | 5 | 18.75 | 085002 | - 20 | 18.75 |
| | 085081 | | 18.75 | 085087 | 5 6 7.5 | 18.75 | 080093 | 20 25 30 | 18.75 |
| | 085082 | | 18.75 | 085088 | 7.5 | 18.75 | 085005 | 30 | 18.75 |
| 1 | 085083 | | 18 (5) | UOUUOO | 0 | *** | 085095 | | |
| | 085084 | | 18.75 | 085090 | 10 | | | | |
| | | | | Doubl | e Range An | nmeters | 005104 | 05 9 5 | 21.75 |
| | 005006 | 101 | 21.75 | 085100 | 8-2 10-1 15-1.5 | 21.75 | 085104 | 25-4.5 | 21.75 |
| | 085007 | 25.0.25 | 21.75 | 085101 | 10-1 | 21.75 | 085105 | 25-5 | 21.75 |
| h | 085098 | 5.01 | 21.75 | 085102 | 15-1.5 | 21.75 | 085106 | 50-5 | |
| ä | | 5-0.5 | 21.75 | 085103 | 10-1 15-1.5 20-2 | 21.75 | | ***** | |
| | 000000 | 0.00 | | Triple | Range Am | meters | 005100 | 95 10 5 | 24.75 |
| V | 005105 | = 0 = 0 0 = | 94 75 | 085113 | 20-4-2 20-8-2 25-2.5-0.5 25-5-2.5 | 24.75 | 085122 | 20-10-0 | 24.75 |
|), | 085107 | 5-2.5-0.25 | 24.75 | 085114 | 20-8-2 | 24.75 | 085118 | 20.63 | 24.75 |
| 1 | 085108 | 10-1-0.1 | 24 75 | 085115 | 25-2.5-0.5 | 24.75 | 085119 | 30-0-3 | 24.75 |
| 1 | 085110 | 10-1-0.0 | 24 75 | 085116 | 25-5-2.5 | 24.75 | 085120 | 15-3-1.5 | 24.75 |
| 1 | 085111 | 10-4.0-1 | | 085117 | 25-2.5-0.5 25-5-2.5 25-10-2.5 | 24.75 | 085121 | 10-0-1.0 | |
| y | 085112 | 15-3-0.15 | 21.10 | | Dimension | ns | | | |

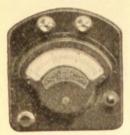
Single Range Millivoltmeters

085112 15-3-0.15 Dimensions Vertical, 4.6 inches, horizontal, 4.4 inches; depth, 1.5 inches.

WESTON MINIATURE PRECISION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 280-PORTABLE VOLT-AMMETERS



Single Range

These instruments possess the same characteristics and advantages as the switchboard instruments. They should be of great value in many kinds of commercial testing where the simultaneous reading of current and e.m. f. is not necessary.

| | | | Single | Range | | | |
|--------|-------|---------|---------|---------|-------|---------|---------|
| Trade | | NGE | Price | Trade | | NGE | Price |
| No. | Volts | Amperes | Each | No. | Volts | Amperes | Each |
| 085142 | 1.5 | 3 | \$28.50 | 085173 | 20 | 4 | \$28.50 |
| 085143 | 3 | 1.5 | 28.50 | 085174 | 20 | 20 | 28.50 |
| 085144 | 3 | 3 | 28.50 | 085175 | 25 | 1 | 28.50 |
| 085145 | 3 | 12 | 28.50 | 085176 | 25 | 5 | 28.50 |
| 085146 | 3 | 15 | 28.50 | 085177 | 25 | 25 | 28.50 |
| 085147 | 3 | 30 | 28.50 | 085178 | 30 | 1.5 | 28.50 |
| 085148 | 4 | 8 | 28.50 | 085179 | 30 | 3 | 28.50 |
| 085149 | 5 | 1 | 28.50 | 085180 | 30 | 6 | 28.50 |
| 085150 | 5 | 5 | 28,50 | 085181 | 30 | 30 | 28.50 |
| 085151 | 5 | 10 | 28,50 | 085182 | 40 | 2 | 28.50 |
| 085152 | 6 | 6 | 28.50 | 085183 | 40 | 8 | 28.50 |
| 085153 | 6 | 12 | 28.50 | 085184 | 40 | 20 | 28.50 |
| 085154 | 6 | 30 | 28.50 | 085185 | 50 | 1 | 28.50 |
| 085155 | 7.5 | 1.5 | 28.50 | 085186 | 50 | 5 | 28.50 |
| 085156 | 7.5 | 7.5 | 28.50 | 085187 | 50 | 10 | 28.50 |
| 085157 | 7.5 | 15 | 28.50 | 085188 | 50 | 25 | 28.50 |
| 085158 | 8 | 2 | 28,50 | 085189 | 60 | 3 | 28.50 |
| 085159 | 8 | 4 | 28.50 | 085190 | 60 | 15 | 28.50 |
| 085160 | 8 | 8 | 28.50 | 085191 | 60 | 30 | 28.50 |
| 085161 | 8 | 20 | 28.50 | 085192 | 75 | 15 | 28.50 |
| 085162 | 10 | 1 | 28.50 | 085193 | 80 | 20 | 28.50 |
| 085163 | 10 | 5 | 28.50 | 085194 | 100 | 1 | 28.50 |
| 085164 | 10 | 10 | 28.50 | 085195 | 100 | 10 | 28.50 |
| 085165 | 10 | 25 | 28.50 | 085196 | 100 | 25 | 28.50 |
| 085166 | 12 | 30 | 28.50 | 085197 | 120 | 3 | 28.50 |
| 085167 | 15 | 1.5 | 28.50 | 085198 | 120 | 12 | 28.50 |
| 085168 | 15 | 3 | 28.50 | 085199 | 120 | 30 | 28.50 |
| 085169 | 15 | 7.5 | 28.50 | 085200 | 150 | 1.5 | 28.50 |
| 085170 | 15 | 15 | 28.50 | 085201 | 150 | 3 | 28.50 |
| 085171 | 15 | 30 | 28.50 | 085202 | 150 | 15 | 28.50 |
| 085172 | 20 | 2 | 28.50 | 085203 | 150 | 30 - | 28.50 |
| | | | Doubl | e Range | | | |
| 085204 | 20-2 | 8-2 | 34.50 | 085213 | 50- 5 | 5-0.1 | 34.50 |



Double Range

| Double Range | | | | | | | | | |
|--------------|--------|----------|-------|--------|--------|--------|-------|--|--|
| 085204 | 20-2 | 8-2 | 34.50 | 085213 | 50- 5 | 5-0.1 | 34.50 | | |
| 085205 | 20-8 | 20-2 | 34.50 | 085214 | 50-5 | 10-1 | 34.50 | | |
| 085206 | 25-2.5 | 2.5-0.25 | 34.50 | 085215 | 50- 5 | 25-2.5 | 34.50 | | |
| 085207 | 25-2.5 | 5-0.5 | 34.50 | 085216 | 50- 5 | 25-5 | 34.50 | | |
| 085208 | 25-2.5 | 25-2.5 | 34.50 | 085217 | 80-8 | 20-2 | 34.50 | | |
| 085209 | 30-3 | 15-1.5 | 34.50 | 085218 | 100-10 | 25-2.5 | 34.50 | | |
| 085210 | 30-3 | 30-3 | 34.50 | 085219 | 150-15 | 15-1.5 | 34.50 | | |
| 085211 | 50-2.5 | 5-0.5 | 34.50 | 085220 | 150-15 | 30-3 | 34.50 | | |
| 085212 | 50-5 | 1-0.1 | 34.50 | | | | | | |



Triple Range

| | TTTDT | o wereno | | | |
|-----------------------------|---------|----------|-------------|------------|-------|
| 085221 25-10-2.5 10-2.5-1 | 40.50 | 085231 | 50-25- 2.5 | mo mio 010 | |
| 085222 30- 3-1.5 30-3-1.5 | 40.50 | 085232 | 50-25- 5 | 25-5-2.5 | 40.50 |
| 085223 30- 6-3 30-6-3 | 40.50 | 085233 | 50-25-10 | 10-1-0.5 | 40.50 |
| 085224 30-15-3 15-3-0.150 | 0.40.50 | 085234 | 50-25-10 | 10-2.5-1 | 40.50 |
| 085225 30-15-3 30-15-3 | 40.50 | 085235 | 50-25-10 | 25-10-5 | 40.50 |
| 085226 40-20-4 20-4-2 | 40.50 | 000-00 | 00 =0 x | 20-8-2 | 40.50 |
| 085227 50- 5-2.5 5-2.5-0.25 | 40.50 | 085237 | 100-25-2.5 | 25-10-2.5 | 40.50 |
| 085228 50- 5-2.5 10-1-0.1 | 40.50 | 085238 | 150-15- 1.5 | 30- 3-1.5 | 40.50 |
| 085229 50- 5-2.5 25-5-2.5 | 40.50 | | 150-15-3 | | 40.50 |
| 085230 50-25-2 5 10-5-0 5 | 40 50 | 085240 | 150-15-3 | 30- 3-1.5 | 40.50 |

Triple Range

Dimensions

Vertical, 4.6 inches; horizontal, 4.4 inches; depth, 1.5 inches.

\$17.00

17.00

30

WESTON MINIATURE PRECISION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 279, PORTABLE BATTERY TESTERS



Trade

085276

085277



These instruments consist of a battery testing voltmeter and a variety of ranges of ammeters. They are designed to facilitate the accurate and rapid testing of single cells of storage and other batteries. The voltmeter is provided with a special detachable spike terminal, designed to minimize the time required to make a test. In form it resembles somewhat a speed indicator, and is extremely convenient to manipulate and to read.

The ammeter also has conveniently arranged binding posts, but otherwise it resembles in general appearance the switchboard instruments. The form of the case of both the voltmeter and the ammeter is convenient to hold in the hand, thus adding much to the general usefulness of the instruments.

VOLTMETERS

0 0 0

| 085261 | | 3- | 0-3 | | \$11.00 |
|--|---|--|--|--|--|
| Trade No. 085262 085263 085264 | Range Amperes 1-0-1 1.5-0-1.5 2-0-2 | Price Each \$17.00 17.00 17.00 | Trade No. 085267 085268 085269 085270 | Range Amperes 7.5-0-7.5 10-0-10 15-0-15 20-0-20 | Price Each \$17.00 17.00 17.00 |
| 085265 085266 | 3-0-3 5-0-5 | 17.00 17.00 ZERO LEFT | 085271 | 30-0-30 | 17.00 |
| 085272 085273 085274 085275 | 1 1.5 2 3 | 17.00 17.00 17.00 17.00 | 085278 085279 085280 085281 085282 | 7.5 10 15 20 25 | 17.00 17.00 17.00 17.00 17.00 |

DIMENSIONS

085283

Voltmeters

Vertical, case only, 3.5 inches, with terminal, 4.9 inches; horizontal, 4.2 inches; depth. 1.35 inches.

Ammeters

Vertical, 3.7 inches; horizontal, 4.2 inches; depth, 1.4 inches.

17.00

17.00

4

5